THE ALBERTA REGIONAL CROP ~ COW CALF CASE STUDY, 1984

VERMILION & BARRHEAD REGIONS

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by

Lloyd J. Andruchow

Production and Resource Economics Branch
Economic Services Division
Alberta Department of Agriculture

1986

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SECTION I

INTRODUCTION

The Alberta Regional Farm Enterprise Research Project was initiated by the Production and Resource Economics Branch in 1979. The main objective of this program was to obtain production cost and return estimates for the main farm enterprises, namely, crops, cattle feeding, hogs and milk production. Although the project was initially confined to the Vermilion region during the development stages, the project was later expanded to the Barrhead region in 1980 to essentially analyze grain/oilseed enterprises on crop farms. Recognizing that the project has provided Alberta Agriculture staff, primary and prospective producers, and agri-business with a current and comprehensive data base, it was felt that the project be continued and that changes were required to enhance the analysis.

A major improvement to the study method occurred in 1980 when the questionnaire was revised to accommodate a computerized analysis. Until 1983, the changes made to the questionnaire and computer package were kept to a minimum so as to allow participants to compare the performance of their farm over time. Reports summarizing each of the 1979-1983 study years in the Vermilion region have been published, the last of which was released in May, 1985. As to the Barrhead region, summary reports for each of the 1980 to 1983 study years have been published with the last report which summarized the 1982 study year being published in October, 1983.

The Branch initiated a major crop case study in the fall of 1983 to monitor costs and returns for the major crops grown in Alberta. All grain farms participating in the Vermilion and Barrhead Regional Farm Enterprise Project were transferred to the crop case study program. Refer to the "1984 Crop Case Study" report for detailed costs and returns for all major crops grown in the six agricultural regions in Alberta.

This report summarizes 1984 costs and returns that were obtained from a total of thirty-six (36) crop-cow calf farms situated in the Vermilion and Barrhead regions. A majority of the participants in the Vermilion region were involved in research during previous years, whereas the Barrhead farms were all selected by their respective District Agriculturist as first-time participants.

A breakdown of the enterprises analysed in their respective numbers is as follows:

TABLE 1: SUMMARY OF ENTERPRISES ANALYZED

	Vermilion Region	Barrhead Region
Enterprise	Number Analyzed	Number Analyzed
Barley	29	15
Oats	17	16
Canola	14	2
Wheat	14	3
Pasture	65	27
Tame Hay	36	29
Greenfeed	12	4
Silage	10	2
Straw	25	16
Summerfallow	14	5
Mixed Grain	4	0
Cow-Calf	21	15

Objectives

The Alberta Farm Enterprise Research Project was developed to help the agricultural producer analyze his farming operation(s) using the enterprise approach. Research activities relating to the 1984 production year focused on the crop-cow calf farm. Recognizing the complementary nature of this enterprise mix along with the high incidence of these farms in north-central Alberta, an objective of this program was to estimate the cash-flow requirements. The program was designed to calculate the cash and non-cash costs for the homegrown feed components which were subsequently used in the analysis of the livestock enterprise.

Extension personnel have often found themselves short of enterprise/whole farm costs and returns information when dealing with farm clientele at the field level. Physical and financial production data for different farming enterprises vary not only within the region but also from farm to farm depending upon the enterprise mix, moisture levels during the growing season, soil type, management practices, etc. Consequently, the objectives of the Alberta Regional Farm Enterprise Research Project were as follows:

1. To document detailed input/output and costs/returns data on both an enterprise and total farm basis for the six farming regions of Alberta.

2. To document enterprise/whole farm data (physical and financial) that accurately describe the relative performance of beginning farmers.

3. To provide each participant with accurate and detailed costs/returns information on both an enterprise and total farm basis.

4. To provide each participant with a comparative interpretation of his farming enterprise(s) relative to the total group studied in the region.

5. To evaluate the relative performance of different farming systems on a regional basis and changes in performance over time.

6. To regularly monitor and periodically update the above data base.

7. To establish and maintain contact with the farming community and to be able to respond promptly to the needs of producers.

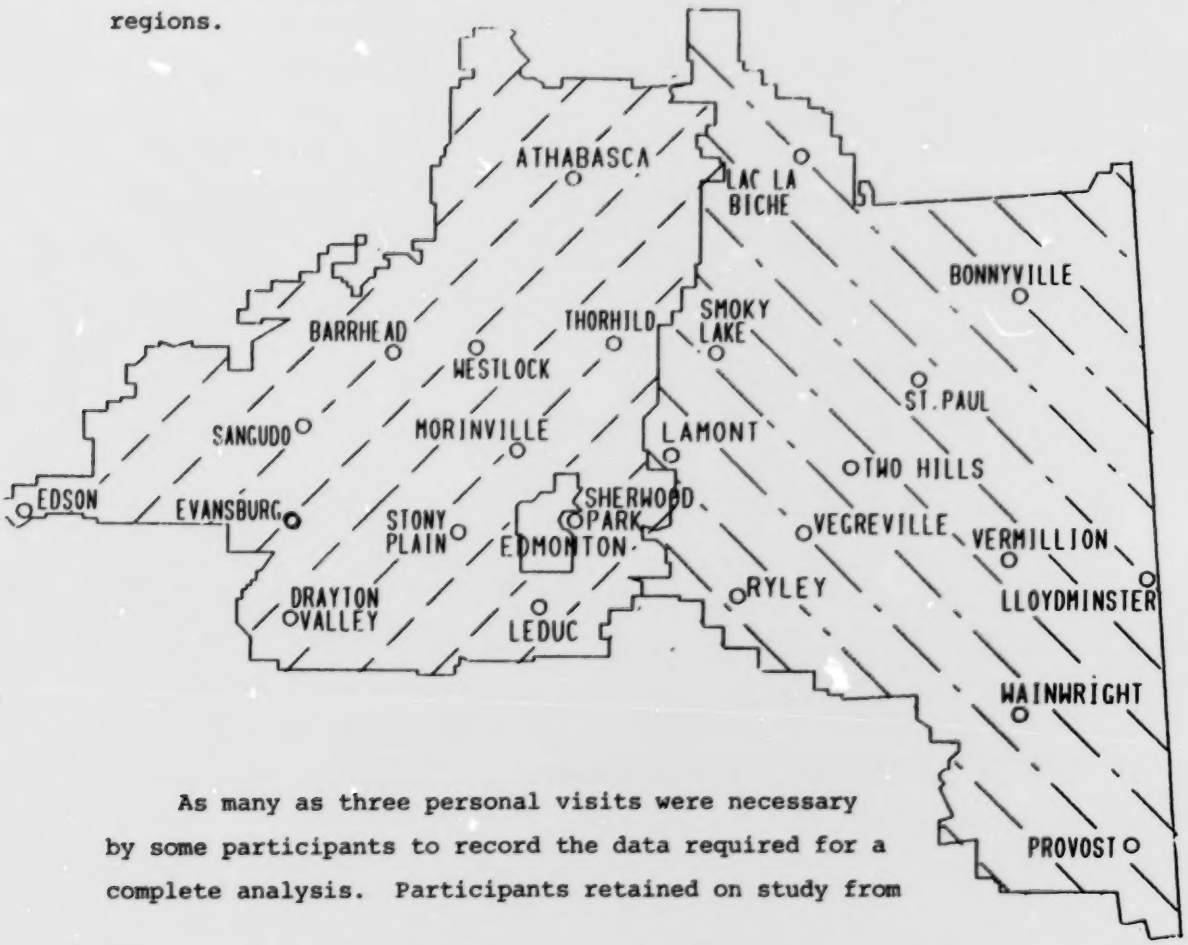
8. To provide headquarters staff, agri-business, and extension field staff with accurate and comprehensive resource information.

The Study Sample

The Vermilion and Barrhead regions are predominantly mixed farming areas. Farmers in this area usually undertake complementary enterprises in order to maximize their farming income. The most common enterprise mix used is either grain and cattle or grain and hogs.

Participants for the project were selected on the basis of their main farming enterprise. To insure that all of the agricultural districts (25) in the two regions were represented, the Regional Farm Economists and District Agriculturists were asked to select the participants for the desired enterprises.

The following map indicates the area of study, and also the location of the agricultural district offices within the Vermilion and Barrhead regions.



As many as three personal visits were necessary by some participants to record the data required for a complete analysis. Participants retained on study from

previous years were much easier to analyze as their investment and inventory data were already established and only required updating. The final visit occurred in the early part of 1984 to record total annual farm expenditures and receipts for 1983.

The questionnaire which was used to gather the information contained three sections. Section I was simply a record of all expenses and receipts for the farm and was very similar to the information required for income tax purposes. Section II was designed to record data specific to each enterprise and essentially relied on the participant to best allocate his total farm expenses and receipts. Section III involved the recording of physical and financial data specific to each enterprise that was not recorded in Sections I and II.

Method of Analysis

All costs and returns data presented in this report are on a per unit of production basis. For example, information for grain production is on a per acre and per bushel basis while livestock is on a per head sold basis. The costs shown in the summary pages were calculated for each category of expense by dividing the total of all expenses by the total number of units of production. For example, the fertilizer expense for wheat grown on five farms is calculated by adding the total fertilizer expense for each farm, and then dividing by the total wheat acreage for the five farms. Thus, the costs and returns were weighted on a per unit of production basis rather than calculated using the simple average approach. In some cases, certain cost items were not incurred in an individual operation and this was accounted for in the method used in determining the average costs for each acre and animal unit on study.

As was discussed previously under objectives, a major revision to the regional enterprise analysis program was to perform a two stage analysis. The first stage examined the cost structure of the main crop enterprises and the farm (barley, oats, hay, silage, pasture, straw, etc.). In the second stage, these costs were used to value homegrown feeds used in the cattle enterprise as opposed to using market value for

such feeds. The approach was used mainly to observe the cash flow requirements for the cow-calf enterprise.

Receipts: Returns for each enterprise represented the actual figures recorded for income tax purposes. However, the total value of the crop grown during the study year had to be estimated as the total harvest is not completely sold until sometime during the next calendar year.

Livestock receipts coincided directly with the amounts recorded for livestock sales. In many instances, livestock producers were either in an expansional or liquidating phase and as such, cash receipts would not truly represent an average year of livestock production. To overcome this, the herd was valued at the beginning as well as at the end of the year. This information was used to calculate the livestock inventory change as displayed in the receipts section, thereby lending to a more accurate assessment of the livestock operation.

Labour Costs: A majority of the study participants relied on hired part-time labour to perform some of the necessary farming operations. Total labour costs as reported in the year end statement were allocated to the various enterprises on the farm by the participants themselves. The operator's labour was valued at $6.50 per hour, an amount comparable to that required to hire a skilled farm labourer. The labour provided by the operator's wife represented the work that she actually did for a given enterprise. Child labour which was quite common in livestock operations was valued below the minimum wage rate. Hired labour was also allocated in a similar way by the operator as he was most familiar with what the hired man was doing.

Material Costs: Most supplies used in grain and livestock production were bought during the production year and recorded as such in the year end statement. However, it was necessary to record the inventory of many inputs such as fertilizer, seed, and chemicals, as these inputs might have been purchased from the previous year for use in the production year under study. An attempt was made to accurately

monitor all costs of inputs used during the twelve month production period, regardless of when purchased. Homegrown seed and feed were valued at market prices and entered as such in the operating cost section of the enterprise analysis.

Miscellaneous Costs: Property taxes, insurance, utilities, etc., were valued at their actual costs and allocated to each enterprise by the study participant. Included as well in this category of expense were the purchase of small tools, accounting and legal fees, and building repairs.

Machine Operating Costs: Machine operating costs include repairs, fuel, lubrication and insurance expenses. Machine operating costs were categorized into various classes (to allow for easier allocation to a specific enterprise), and include farm power machinery, general crop machinery, haying machinery, specialty crop machinery, dairy and beef equipment, swine equipment, poultry equipment, general livestock equipment, and miscellaneous livestock equipment. Also, many of the study participants provided the cost of fuel and repairs for car and power machinery.

Capital Costs

Cash Rent/Crop Share: Costs associated with the primary or fixed resources used in grain and livestock production are indicated in the capital cost section. Land represented the major part of the investment and the actual cost calculated related to tenure and equity. Rented land used in crop production was most commonly expressed on a cash rent basis and reflected the actual market value at the time of analysis. For rented land using a crop share arrangement, yield and price per bushel, as well as the cost of inputs were used to arrive at the net land cost.

Taxes and Insurance: Actual costs were recorded for land taxes and building/equipment insurance. These costs are associated with the ownership of capital assets therefore being considered as capital overhead costs.

Paid Capital Interest: The actual cost associated with owned land depended on the equity levels reported by the various farms. Beginning farmers who recently purchased their farms had high ownership costs in terms of mortgage interest as compared to established farmers. Interest on land as well as the interest paid on buildings and machinery loans were included under the heading of "Paid Capital Interest". Return to equity was also calculated since the participants had provided the market value of all of their investment as well as the amount of liabilities for each category of investment.

Depreciation: Depreciation was determined for all of the buildings and machinery that were used in the farming operation. In some cases, depreciation was calculated by taking a percentage of the market value that was appropriate to the grain enterprise and dividing by the estimated remaining years of useful life. Building depreciation was allocated only to the crop and livestock enterprises while machinery depreciation was allocated to all enterprises including summerfallow. As calculated, the machinery depreciation cost associated with an acre of summerfallow was approximately 45 percent of a cropped acre.

SECTION II

SUMMARY OF COSTS AND RETURNS FOR HOMEGROWN FEED

The first stage of this project examined the cost structure for the crop enterprises on the farm. The main objective was to estimate the cash and non-cash costs for the crops that were subsequently transferred to the cattle enterprise. In order to observe the actual costs incurred by the cow-calf enterprise, the homegrown feed was transferred to the cow-calf operation at production cost value as opposed to an arbitrary market value. This section provides a summary of the crop enterprises analyzed in the Vermilion and Barrhead regions.

The data provided in the crop summary tables are arranged in several sections. Information on the size of enterprise (acres), crop value, crop insurance receipts, and miscellaneous receipts are shown in Section A.

Section B provides a summary of the cost components on a total farm, per acre, and per bushel basis. The allocation of individual cost items to the different crops was obtained directly from the study participants.

Section C provides data on the various capital cost items and unpaid family labour. In comparison to the cash cost, the capital costs vary greatly from farm to farm depending on land tenure and equity levels. Farm managers consider many of these costs as farm overhead and do not always take them into account when making decisions.

Section D summarizes the overall performance of each crop enterprise. Of critical importance is the return over cash costs which producers usually refer to when assessing the various alternatives. Other management indicators included in this section include return to capital, return to equity, labour hours per acre, yield per acre, etc. Also shown is the debt capacity which is based on an amortization period of 15 years and 12 percent and the production value of land based on 25 years amortization and ten percent.

Detailed investment items are listed in Section E. The participants estimated the market value of their machinery, land and buildings.

The value of the crop grown during the study year had to be estimated since most of the production was used on the farm. However, if the crop was sold at the time of data collection the actual price received was used to complete the cost and return budget for the enterprise. Shown in Table 2 are the price estimates that were used for the 1984 crop.

TABLE 2: LIST OF GRAIN AND FORAGE PRICES USED IN VALUING 1984 PRODUCTION

Crop	Price
Barley	$2.60/bu.
Oats	$1.80/bu.
Mixed Grain	$2.20/bu.
Greenfeed (15% Moisture)	$45.00/ton
Tame Hay (15% Moisture)	$60.00/ton
Silage (15% Moisture)	$60.00/ton
Pasture	$7.00/A.U.M
Native Hay (15% Moisture)	$40.00/ton
Straw	$15.00/ton

Table 3 provides summaries of 1984 costs and returns for the various feed grain and forage enterprises analyzed on the participating grain cow-calf farms in the Vermilion region. For some crops, a cost comparison by land tenure is also provided and may provide valuable information when considering a land purchase. Table 4 provides similar cost and return tables for the crop enterprise analyzed in the Barrhead region.

For more detailed cost and return information on the various crops grown in the Vermilion and Barrhead regions, refer to Appendix 1 and 2, respectively.

TABLE 3: SUMMARY OF COSTS AND RETURNS FOR CROPS SURVEYED - 1984 VERMILION REGION

	Barley Owned Land	Barley Rented Land	Oats Owned Land	Mixed Grain	Straw
Number of Farms	20	9	14	4	25
Average Acreage	243.8	347.33	136.2	90.8	278.0
Yield	50.5 bu./acre	37.2 bu./acre	59.8 bu./acre	35.8 bu./acre	0.67 ton/acre
	$ Per Acre				
A. Value of Production	137.99	101.48	111.56	89.50	10.70
B. Cash Costs					
Materials	33.27	38.27	21.18	21.46	0.00
Machine Operating	17.00	18.41	22.85	20.04	3.73
Miscellaneous	16.14	16.51	12.26	15.22	1.46
Total	66.41 1.32/bu	73.19 1.97/bu.	56.29 0.95/bu.	56.72 1.59/bu.	5.19 7.73/ton
C. Capital Costs & Unpaid Labor					
Cash Rent/Crop Share	0.00	20.76	0.00	9.36	0.00
Depreciation	19.63	15.46	23.80	12.33	3.18
Capital Interest Paid	13.61	3.63	9.21	11.13	0.19
Operator & Family Labor	12.29	10.54	15.56	8.89	4.10
Total	45.53	50.40	48.57	41.71	7.47
Total Production Costs	111.94 2.22/bu.	123.59 3.32/bu.	104.86 1.78/bu.	98.42 2.75/bu.	12.66 18.85/ton
D. Return Over Cash Costs	71.59	28.28	55.27	32.78	5.51
Return to Capital	59.30	17.74	39.70	23.89	1.40
Return to Equity	26.06	-22.11	6.70	-8.93	-1.96
Equity (%)	78.4	61.7	78.6	50.4	79.4
E. Investment					
Land	477.56	0.00	477.87	443.40	0.00
Machinery	163.61	128.10	200.64	103.85	32.08
Buildings	46.51	32.55	52.17	27.37	1.20
Total	687.68	160.65	730.68	574.63	33.28

TABLE 3 CONTINUED: SUMMARY OF COSTS AND RETURNS FOR CROPS SURVEYED - 1984 VERMILION REGION

	Tame Pasture Owned Land	Native Pasture Owned Land	Tame Hay Owned Land	Silage Owned Land	Greenfeed Owned Land
Number of Farms	23	25	26	7	9
Average Acreage	230.5	698.6	148.8	203.7	75.0
Yield	0.79 A.U.M./acre	0.54 A.U.M./acre	1.59 tons/acre	1.3 tons/acre	1.07 tons/acre
	$ Per Acre				
A. Value of Production	6.09	3.93	99.21	80.07	61.88
B. Cash Costs					
Materials	1.82	0.12	7.13	16.41	19.30
Machine Operating	0.13	0.04	9.72	16.45	14.97
Miscellaneous	13.19	1.46	8.82	9.96	14.12
Total	5.14 6.48/A.U.M.	1.62 2.99/A.U.M.	25.67 16.10/ton	42.82 33.02/ton	48.39 45.12/ton
C. Capital Costs & Unpaid Labor					
Cash Rent/Crop Share	0.00	0.00	0.00	0.00	0.00
Depreciation	1.15	0.05	11.00	16.71	20.25
Capital Interest Paid	5.59	1.88	8.88	14.64	9.88
Operator & Family Labor	1.37	1.21	9.04	8.55	8.35
Total	8.12	3.14	28.92	39.90	38.48
Total Production Costs	13.26 16.72/A.U.M.	4.76 8.79/A.U.M.	54.59 34.25/ton	82.72 63.80/ton	86.87 80.99/ton
D. Return Over Cash Costs	0.95	2.31	73.54	37.25	13.49
Return to Capital	-0.42	1.10	64.50	28.70	5.14
Return to Equity	-7.17	-0.83	44.61	-2.66	-24.99
Equity (%)	77.5	73.2	75.5	52.9	82.2
E. Investment					
Land	472.92	137.98	504.23	465.48	627.95
Machinery	1.34	0.48	85.64	139.74	175.81
Buildings	19.38	0.00	42.33	38.31	32.86
Total	493.64	138.46	632.20	643.53	836.62

TABLE 4: SUMMARY OF COSTS AND RETURNS FOR CROPS SURVEYED - 1984 BARRHEAD REGION

	Barley Owned Land	Barley Rented Land	Oats Owned Land	Oats Rented Land	Straw
Number of Farms	10	5	11	5	16
Average Acreage	131.4	90.6	55.7	83.0	155.8
Yield	52.5 bu/acre	55.1 bu/acre	78.4 bu/acre	65.0 bu/acre	0.88 ton/acre
	$ Per Acre				
A. Value of Production	138.17	143.15	142.15	117.00	13.25
B. Cash Costs					
Materials	26.48	26.80	22.17	22.32	0.00
Machine Operating	16.13	14.47	14.37	13.26	4.63
Miscellaneous	19.99	13.52	12.04	17.43	2.41
Total	62.60 1.19/bu.	54.79 1.00/bu.	48.58 0.62/bu.	53.01 0.82/bu.	7.04 7.97/ton
C. Capital Costs & Unpaid Labor					
Cash Rent/Crop Share	0.00	12.80	0.00	12.57	0.00
Depreciation	22.60	18.76	22.41	25.96	3.71
Capital Interest Paid	15.08	3.96	10.45	2.01	0.00
Operator & Family Labor	14.40	17.38	24.06	16.77	3.21
Total	52.08	52.89	56.91	57.32	6.92
Total Production Costs	114.68 2.19/bu.	107.68 1.96/bu.	105.49 1.35/bu.	110.32 1.70/bu.	13.97 15.81/ton
D. Return Over Cash Costs	75.57	88.37	93.57	63.99	6.21
Return to Capital	61.17	70.99	69.52	47.22	3.00
Return to Equity	23.49	35.47	36.66	6.68	-0.71
Equity (%)	81.6	82.3	81.7	82.4	73.2
E. Investment					
Land	451.76	0.00	426.42	0.00	0.00
Machinery	230.02	153.01	209.64	224.72	34.30
Buildings	43.63	32.53	57.61	40.15	1.98
Total	725.41	185.54	693.67	264.87	36.28

TABLE 4 CONTINUED: SUMMARY OF COSTS AND RETURNS FOR CROPS SURVEYED - 1984 BARRHEAD REGION

	Pasture Owned Land	Pasture Rented Land	Tame Hay Owned Land	Tame Hay Rented Land	Greenfeed Owned Land
Number of Farms	17	10	16	13	4
Average Acreage	199.3	265.5	189.4	187.4	43.8
Yield	1.69 A.U.M./acre	0.94 A.U.M./acre	1.61 ton/acre	1.66 ton/acre	1.16 ton/acre
	$ Per Acre				
A. Value of Production	12.00	6.66	96.72	99.34	
B. Cash Costs					
Materials	4.17	1.09	7.29	3.81	18.91
Machine Operating	1.18	.70	11.27	11.61	13.07
Miscellaneous	6.63	2.08	11.08	12.22	12.42
Total	11.98 7.09/A.U.M.	3.87 4.13/A.U.M.	29.64 18.42/ton	27.64 16.70/ton	44.40 38.28/ton
C. Capital Costs & Unpaid Labor					
Cash Rent/Crop Share	0.00	6.49	0.00	15.51	0.00
Depreciation	3.68	1.37	10.86	8.75	15.56
Capital Interest Paid	8.99	0	10.27	1.10	23.50
Operator & Family Labor	0.99	0.87	9.06	6.19	17.90
Total	13.67	8.72	30.19	31.55	56.97
Total Production Costs	25.65 15.17/A.U.M.	12.59 13.45/A.U.M.	59.83 37.18/ton	59.19 35.75/ton	101.37 87.38/ton
D. Return Over Cash Costs	0.01	2.79	67.08	71.69	7.80
Return to Capital	-0.98	1.92	58.02	65.50	-10.10
Return to Equity	-13.65	-5.93	36.89	40.15	-49.17
Equity (%)	80.0	69.9	77.6	81.5	75.0
E. Investment					
Land	355.38	0.00	387.56	0.00	389.04
Machinery	10.99	3.51	85.59	70.18	127.38
Buildings	43.26	16.00	49.73	22.21	40.40
Total	409.63	19.51	522.89	92.40	556.82

SECTION III

SUMMARY OF COSTS AND RETURNS - COW-CALF ENTERPRISE

The latest census indicates that the second largest source of income for farms in the Vermilion and Barrhead regions was from the sale of cattle. Livestock production on mixed farms is complementary in nature with grain production. That is, livestock feed requirements such as hay, aftermath pasture and marginal grazing which may not otherwise be marketable, are provided by the grain enterprise. This section provides detailed information on the costs and returns for the average cow-calf enterprise analyzed in the Vermilion and Barrhead regions.

The data provided on the Livestock Summary Tables are arranged in several sections. General information on the physical size of the average enterprise analyzed is shown on the upper portion of the Table. This includes the average number of cows and the average selling weight. For more detailed information on the cost of production and feed composition in the Vermilion and Barrhead regions, refer to Appendix 3 and 4, respectively.

Section A provides data that is related to livestock receipts. Sales information are shown specifically for the production stock and the net sales of cows/bulls is the difference between breeding animals sold and breeding animals purchased. Inventory adjustment which may be positive or negative is used to reflect the change in value of the livestock on the farm from the beginning to the end of the twelve month study period.

Section B summarizes the cash cost components. The cash cost established for homegrown feed was a result of the stage I analysis which assessed the production costs for each crop enterprise. Purchased feed, veterinary and medicine, and operating interest paid were obtained from the participant's year end statement. Equipment fuel and repair costs were based on an allocation applicable to the cow-calf enterprise. The miscellaneous cash cost category includes such items as hired labour, production stock purchased, utilities, custom work, transportation/

marketing costs, building/fence repairs, etc. Total cash costs must be covered in the short run to maintain viability.

Section C completes the production cost section by accounting for all costs associated with the ownership of investment items. These include an estimate of depreciation on buildings and machinery and the capital interest paid in relation to the intermediate and long term debt. The non-cash costs associated with homegrown feed and the unpaid family labour are also included in this section.

Section D attempts to evaluate the overall performance of the livestock operation. Of critical importance is the return over cash cost, and this is usually the figure referred to when choosing among different farming alternatives. Costs which are not included under the heading of operating cost may be considered as farm overhead and may not always be taken into account when making decisions. As well, total labour as used by a specific enterprise is indicated in this section and is useful from a management point of view.

Of interest to most producers is the total investment, which is summarized in Section E. Included in investment were buildings and improvements, breeding stock and machinery. The investment in pasture land was not allocated to the livestock enterprise. Instead, all land used for grazing purposes was converted to an animal unit month (A.U.M.) basis and a fair market value per A.U.M. was applied for each specific type of grazing to arrive at a cost.

The study participants also expressed an interest in knowing what feed inputs were used in the ration for the average cow-calf operation on study. To meet this requirement, Section F has been included in the Appendix tables, and provides in some detail the feeding inputs on a total quantity, total cost, and cost per cow basis.

Due to the limited number of cattle producers participating in this analysis (36 in number), the reader is advised to exercise some judgement when attempting to interpret the costs and returns data presented. Although some cattle producers were selling feeder or finishing cattle,

their entire cattle operation was analyzed as one enterprise, thus eliminating the task of separating out the feed, labour, fuel/repairs, investment costs, etc. However, a comparison of the cow-calf enterprise by weight of cattle sold is presented in Section III.

Table 5 provides a summary of the costs and returns for the average farm studied in Vermilion and Barrhead regions. For the 21 farms participating from the Vermilion region, an average basic herd of 111.5 cows were reported. The percentage of calves weaned averaged 92.06 while the average weight of production stock sold was 888.12 pounds. In the Barrhead region, the average herd size for the 15 participating farms was 104.5 cows. The percentage of calves weaned was 92.15, while the average weight of production stock sold was 787.5 pounds.

The study participants estimated the amount of labour utilized in their cattle operation. Labour hours per cow in the Vermilion region, where heavier production stock were sold, averaged 18.03 hours and compares with 13.17 hours reported for the Barrhead study group. The equity percentage for the study farms in each region was similar, averaging 85 percent.

Referring to Section A of Table 5, the average value of production per cow in the Vermilion region was $677.50. Their relatively high receipts were a result of; 1) the selling of heavier animals, 2) culled cows/bulls being replaced internally as compared to purchasing replacements, and 3) a relatively high marketing rate of production stock at .87 head per cow as compared to .62 head per cow in the Barrhead region. The value of production in the Barrhead region averaged $502.13 per cow of which 20 percent was accounted for in the increase in the value of inventory. A rather small value for net sales of cows/bulls was indicative of the fact that culled cows/bulls were being replaced by purchased stock.

Section B of Table 5 provides a summary of the cash cost components on a per cow basis. As indicated earlier, the study involved a cost analysis of the crop enterprises such as hay, pasture, greenfeed, straw, etc., which then provided a cost of production base for the homegrown

feed component. As a result, the cost of homegrown feed was equal to the cash cost as shown in Section B plus the non-cash costs (interest, depreciation, unpaid labour) shown in Section C. As can be observed, the cash costs associated with homegrown feed production and the purchased feed represented over 65 percent of the cash production costs in the Vermilion and Barrhead regions. The total cash costs per cow in the Vermilion region averaged $462.88 per cow and compares to $317.27 per cow in the Barrhead region. The value of production was sufficiently high in 1984 to cover cash production costs. Returns over cash costs ranged from $184.86 per cow in the Barrhead region to $214.62 per cow in the Vermilion region.

The non-cash production costs such as capital interest paid, depreciation, and unpaid family labour are summarized in Section C, Table 5. As expected, the non-cash costs associated with homegrown feed production were most prominent, representing over 54 percent of the total non-cash costs in both regions surveyed. Also of significance was the cost of family labour which represented 33 percent and 27 percent of the non-cash costs in the Vermilion and Barrhead regions respectively. The capital and unpaid labour costs totalled $341.77 per cow in the Vermilion region and $272.91 per cow in the Barrhead region. Total production costs averaged $590.18 per cow in the Barrhead region and $804.65 per cow in the Vermilion region.

The value of production less the cash costs and cost of unpaid labour equal the return to capital. The return to capital assets (contribution margin) which includes land, buildings, breeding herd and machinery averaged $106.34 per cow in the Vermilion region and $110.21 per cow in the Barrhead region. Returns, however, were insufficient in 1984 to cover all production costs. Production costs exceeded returns by $127.15 per cow in the Vermilion region and $88.06 in the Barrhead region. The cow-calf operators in 1984 on average had no returns to their equity.

Section E summarizes the investment items for a typical cow-calf enterprise. Approximately 65 percent of the overall cow-calf investment was represented by the breeding herd which was valued by the study

participants at the time of data collection. The investment in machinery and improvements were about equal in terms of market value; each accounting for 15 to 18 percent of the total investment.

TABLE 5: SUMMARY OF COSTS AND RETURNS FOR THE COW-CALF ENTERPRISE - 1984

	Vermilion Region	Barrhead Region
Number of Farms	21	15
Average number of Cows	111.52	104.47
Average Selling Weight	888.12	787.45
	------ $ per cow ------	
A. VALUE OF PRODUCTION		
Sale of Production Stock	573.98	350.61
Net Sales of Cows/Bulls	48.05	.73
Inventory Adjustment	46.13	146.99
Miscellaneous Receipts	9.33	3.8
TOTAL	677.50	502.13
B. CASH COSTS		
Homegrown Feed (Cash)	227.42	162.76
Purchased Feed	85.40	44.89
Equipment, Fuel and Repairs	29.03	35.29
Vet., Medicine	17.42	14.36
Operating Interest Paid	18.09	11.89
Miscellaneous	85.52	48.08
TOTAL	462.88	317.27
C. CAPITAL COSTS AND UNPAID LABOUR		
Depreciation	33.25	36.49
Capital Interest Paid	14.58	13.91
Homegrown Feed (Non-Cash)	185.66	147.87
Operator and Family Labour	108.27	74.65
TOTAL	341.77	272.91
D. MANAGEMENT INDICATORS		
Returns Over Cash Costs	214.62	184.86
Return to Capital	106.34	110.21
Return to Equity	-127.15	-88.06
Labour Hours Per Cow	18.03	13.17
Weaning Percentage	92.06	92.15
Equity Percentage	85.03	85.32
E. INVESTMENT		
Breeding Stock	832.38	872.04
Improvements	242.08	199.50
Machinery	217.75	230.84
TOTAL	1292.22	1302.39

SECTION IV

SUMMARY OF COSTS AND RETURNS FOR THE COW-CALF ENTERPRISE BY SELLING WEIGHT OF CALVES

The cow-calf farms on study in 1984 were not homogenous. Less than 25 percent of the farms could be termed pure cow-calf whereby the majority of the calves were sold in the fall after they were weaned. Although the average cow-calf farm on study sold feeder calves weighing approximately 825 pounds, several farms chose to finish their production stock and therefore sold cattle in excess of 1000 pounds.

Cow-calf operations are most interested in knowing the economic benefits from retaining their calves in the fall and extending the feeding period. It was unfortunate that with the limited number of farms on study in 1984 we were not able to compare the various production systems or options that are available to cow-calf producers. However, an attempt has been made to analyze the costs and returns by weight of production stock sold.

To observe differences in costs and returns by weight of cattle sold, the study farms were grouped into two selling weight classes: less than 750 pounds and those with 750 pounds and over. The results were in agreement with previous observations that returns increased as selling weight increased. A summary of costs and returns by weight of production stock sold are shown in Tables 6 and 7 for the Vermilion and Barrhead regions, respectively.

Vermilion Region

Referring to Table 6, the 10 farms which sold production stock less than 750 pounds were relatively small, averaging 94.6 cows. Their sale weight averaged 659 pounds. The 11 farms selling heavier stock had approximately 127 cows and their average sale weight exceeded 1019 pounds. Shown in Section A of Table 6 is a comparison of the value of production for the two weight classes. The income from the sale of

production stock for the heavier weight class averaged $674.40 per cow sold - about 58 percent higher than the $425.79 reported for the smaller weight class. Net sales of cows/bulls for the group selling heavier stock was significant, as replacements were retained from the herd. A negative net sale of cows/bulls for the lighter classes signified that the purchase of replacement stock exceeded the income from culls. The inventory adjustment for both groups was positive, indicating a higher value of cattle inventory at the end of the year as compared to the beginning of the year.

Section B summarizes the cash cost components. The cash costs for homegrown feed production and purchased feed averaged $240.47 per cow for the less than 750 pound selling weight class and $361.85 per cow for the 750 pound and over selling weight class. Details on feed composition and costs are included in Appendix 3. Total cash costs averaged $362.92 per cow for the lighter weight class and $530.62 for the heavier weight class. Returns over cash costs for the farms selling calves under 750 pounds was $101.52 per cow, whereas, farms selling cattle with weights over 750 pounds had a return over cash costs of $291.25 per cow.

The capital and unpaid labour costs are presented in Section C. Most significant were the non-cash costs that are associated with homegrown feed production. These averaged $167.12 and $198.18 per cow for the groups selling lighter and heavier calves, respectively. The equity level for the groups selling heavier stock was relatively lower, averaging 80.5 percent. The capital interest paid, at $21.07 per cow, was four times greater than that of the group selling lighter calves, for which the average equity was 91.2 percent. No significant difference in the labour cost was observed for the two groups. The total capital and unpaid labour costs averaged $319.94 for the group selling calves under 750 pounds and $356.56 for the group selling stock 750 pounds and over.

Although returns were insufficient in covering all production costs, the group selling heavier stock had a return to capital of $184.01 per cow, and were short $65.31 per cow of covering all costs. The group selling lighter stock had a return to capital of -$8.27 per cow, and were short $218.42 per cow in covering all production costs.

TABLE 6: SUMMARY OF COSTS AND RETURNS FOR THE COW-CALF ENTERPRISE - BY SELLING WEIGHT OF CALVES
VERMILION REGION - 1984

	Less than 750 Pounds	750 Pounds and Over
Number of Farms	10	11
Average number of Cows	94.6	126.91
Average Selling Weight	659.09	1019.17
	------ $ per cow ------	
A. VALUE OF PRODUCTION		
Sale of Production Stock	425.79	674.40
Net Sales of Cows/Bulls	-9.77	87.24
Inventory Adjustment	38.28	51.46
Miscellaneous Receipts	10.15	8.78
TOTAL	464.44	821.88
B. CASH COSTS		
Homegrown Feed (Cash)	177.49	261.26
Purchased Feed	62.98	100.59
Equipment, Fuel and Repairs	27.26	30.23
Vet., Medicine	11.80	21.23
Operating Interest Paid	7.64	25.16
Miscellaneous	75.75	92.15
TOTAL	362.92	530.62
C. CAPITAL COSTS AND UNPAID LABOUR		
Depreciation	37.95	30.07
Capital Interest Paid	5.01	21.07
Homegrown Feed (Non-Cash)	167.19	198.18
Operator and Family Labour	109.80	107.24
TOTAL	319.94	356.56
D. MANAGEMENT INDICATORS		
Returns Over Cash Costs	101.52	291.25
Return to Capital	-8.27	184.01
Return to Equity	-218.42	-65.31
Labour Hours Per Cow	18.45	17.75
Weaning Percentage	93.23	91.26
Equity Percentage	91.16	80.54

Barrhead Region

Table 7 presents a comparison of 1984 costs and returns for the group of farms (8) which sold cattle under 750 pounds and for the group of farms (7) which sold cattle 750 pounds and over. The group of farms which sold lighter calves averaged 110 cows with weight of production stock averaging 669 pounds. Farms which sold heavier stock averaged 97.7 cows with an average selling weight of 886.74 pounds. The value of production as shown in Section A, averaged $417.33 per cow for the group which sold lighter stock and $611.60 per cow for the group which sold heavier stock. Both groups had significantly higher year end inventories as compared to the beginning of the year. The group with selling weights 750 pounds and over had costs on herd replacements exceeding sales of culls thereby resulting in a net sale of cows/bulls of -$37.19 per cow.

Referring to Section B, cash production costs for both groups were very similar, averaging $315.98 per cow for the group which sold cattle 750 pounds and over. Similar to the Vermilion region, the returns over cash costs for the group which sold lighter stock was $101.35 per cow and $292.66 for the group which sold heavier stock.

The cost of feed, on a per cow basis, was observed to be significantly higher for the group which sold production stock at less than 750 pounds. Upon observation this group was feeding similar amounts of hay and straw as the group which sold heavier stock, but was also utilizing significant amounts of greenfeed and silage. Details on feed composition and costs are included in Appendix 4. The capital and unpaid labour costs (Section C) for the group which sold lighter calves averaged $286.16 per cow and compares to $255.81 per cow for the group which sold heavier cattle. In summary, the total production costs averaged $602.14 per cow for the group which sold stock under 750 pounds and $574.75 per cow for the group which sold stock at 750 pounds and over.

Returns to capital were $35.05 and $207.23 per cow for the group which sold lighter calves and heavier calves, respectively. As to returns over all production costs, the group which sold lighter calves were short $184.81, per cow while the group which sold heavier calves showed a return to equity of $36.85 or 2.76 percent.

TABLE 7: SUMMARY OF COSTS AND RETURNS FOR THE COW-CALF ENTERPRISE - BY SELLING WEIGHT OF CALVES
BARRHEAD REGION - 1984

	Less Than 750 Pounds	750 Pounds and Over
Number of Farms	8	7
Average number of Cows	110.38	97.71
Average Selling Weight	669.03	886.74
	- - - $ per cow - - -	
A. VALUE OF PRODUCTION		
Sale of Production Stock	239.78	493.68
Net sales of Cows/Bulls	30.10	-37.19
Inventory Adjustment	140.69	155.11
Miscellaneous Receipts	6.75	0.00
TOTAL	417.33	611.60
B. CASH COSTS		
Homegrown Feed (Cash)	163.47	161.84
Purchased Feed	44.96	44.80
Equipment, Fuel and Repairs	33.26	37.90
Vet., Medicine	16.56	11.51
Operating Interest Paid	12.63	10.94
Miscellaneous	45.10	51.95
TOTAL	315.98	318.94
C. CAPITAL COSTS AND UNPAID LABOUR		
Depreciation	29.53	45.47
Capital Interest Paid	24.00	.87
Homegrown Feed (Non-Cash)	166.33	124.04
Operator and Family Labour	66.30	85.43
TOTAL	286.16	255.81
D. MANAGEMENT INDICATORS		
Returns Over Cash Costs	101.35	292.66
Return to Capital	35.05	207.23
Return to Equity	-184.81	36.85
Labour Hours Per Cow	13.14	13.22
Weaning Percentage	89.47	95.61
Equity Percentage	81.92	88.65

SECTION V

SUMMARY OF COSTS AND RETURNS BY SIZE OF HERD

A general characteristic of any production unit is that the unit becomes more efficient as its scale of operation increases. However, beyond a certain size any further expansion results in diseconomies of scale due to the limitations of labour, capital, equipment, etc. Thus, as the size of an operation increases, cost savings can be expected especially in areas such as fixed overhead and operating costs. For example, as a farm increases in size its fixed machinery ownership costs per acre will decrease. Also, operating cost savings can be achieved through the use of larger equipment, bulk buying and more efficient use of labour and management, all of which results in a higher return to management.

To determine if the size of operation had any effect on the costs and returns of the cow-calf enterprise, the study farms in both regions were divided into two size groups - farms with 100 cows or less and farms with over 100 cows.

Vermilion Region

Table 8 presents a cost and return comparison for the cow-calf enterprise by herd size in the Vermilion region. The 11 farms with 100 cows or less had an average of 63.6 cows and were selling production stock weighing an average of 725.8 pounds. In comparison, the 10 farms with over 100 cows averaged 164.3 cows and had an average selling weight of 936.56 pounds.

Referring to Section A, the value of production for the smaller size group averaged $513.09 per cow. The net sales of cows/bulls was significant at $75.54 per cow and represented about 15 percent of the income. By comparison, the larger size group had a value of production of $747.44 per cow, of which $648.77 was from the sale of production stock. The additional $98.67 was comprised of inventory adjustment, net sales of cows/bulls and miscellaneous receipts.

TABLE 8: SUMMARY OF COSTS AND RETURNS FOR THE COW-CALF ENTERPRISE - BY SIZE OF HERD
VERMILION REGION - 1984

	100 Cows and Less	Over 100 Cows
Number of Farms	11	10
Average number of Cows	63.55	164.30
Average Selling Weight	725.84	936.56
	------ $ per cow ------	
A. VALUE OF PRODUCTION		
Sale of Production Stock	398.19	648.77
Net Sales of Cows/Bulls	75.54	36.36
Inventory Adjustment	37.07	49.99
Miscellaneous Receipts	3.29	12.33
TOTAL	513.09	747.44
B. CASH COSTS		
Homegrown Feed (Cash)	142.12	263.71
Purchased Feed	60.48	96.00
Equipment, Fuel and Repairs	34.29	26.79
Vet., Medicine	12.91	19.34
Operating Interest Paid	2.03	24.92
Miscellaneous	87.34	84.75
TOTAL	339.17	515.51
C. CAPITAL COSTS AND UNPAID LABOUR		
Depreciation	40.91	29.99
Capital Interest Paid	6.78	17.90
Homegrown Feed (Non-Cash)	158.87	197.06
Operator and Family Labour	109.05	107.94
TOTAL	315.60	352.90
D. MANAGEMENT INDICATORS		
Returns Over Cash Costs	173.92	231.93
Return to Capital	64.87	124.99
Return to Equity	-141.68	-120.97
Labour Hours Per Cow	17.82	18.12
Weaning Percentage	89.56	93.12
Equity Percentage	92.82	81.32
E. INVESTMENT		
Breeding Stock	816.64	839.08
Improvements	303.17	216.09
Machinery	275.89	193.02
TOTAL	1395.69	1248.19

The cash cost structure for the two groups are compared in Section B of Table 4. Feed costs represented almost 70 percent of the cash costs for the large size group. Also of significance were their higher veterinary - medicine expenses and the operating interest paid. Total cash costs for the small size group averaged $339.17 per cow and compares to $515.51 for the larger size.

As expected, cost savings resulting from larger size can be observed in the area of fixed overhead. Depreciation costs for the larger group were about 25 percent lower relative to the smaller group and was due to the lower improvement and machinery investment reported in Section E. Operator labour costs were also lower on a per cow basis despite the higher selling weights, which would have had the effect of increasing the labour requirement. Larger farms, however, had a significantly higher capital interest paid which was directly related to their lower equity levels. The total production costs for the smaller farms averaged $654.78 per cow and compares to $868.41 for the larger farms.

Higher net returns for the larger size farms can be attributed to not only the increased size but also the higher weights of production stock sold. Returns over cash costs averaged $173.92 for the smaller size farms and $231.93 for the larger size. Returns to capital for the larger size farms were significantly higher at $124.99 per cow compared to $64.87 for the smaller farms. Both groups had insufficient returns to cover all production costs. The smaller farms were short $141.68 per cow of covering all costs while the larger farms were short $20.97 per cow. As noted earlier, the equity level on larger farms averaged 81.3 percent and compares with 92.8 percent for the smaller farms.

Barrhead Region

A summary of 1984 costs and returns by herd size in the Barrhead region is presented in Table 9. Seven farms had 100 cows or less and were selling production stock weighing about 781 pounds. The eight larger sized farms with an average of 137 cows were selling cattle with similar weights averaging 790 pounds. Referring to Section A, the value of production for the smaller farms averaged $552.64 per cow and compares

with an average of $480.49 per cow for the larger farms. Both size groups reported similar increases in value of inventory. However, the larger farms reported a negative net sales of cows/bulls as the cost of replacement exceeded the returns from culls.

The higher cash costs (Section B) reported for the smaller farms is mainly attributed to the feed component as production costs for homegrown feed and purchased feed were significantly greater than that calculated for the larger farms. Total cash costs for the smaller farms averaged $366.54 per cow and $296.16 per cow for the larger farms.

Similar to the findings in the size analysis in the Vermilion region, cost savings with respect to size for fixed overhead items were observed in the Barrhead region. The lower machinery and improvement investment on a per cow basis for the larger farms accounts for the lower depreciation (Section C). Labour hours per cow and the associated costs were considerably lower for the large size farms. The non-cash costs associated with homegrown feed production were considerably lower for the larger farms. The equity levels on larger farms averaged 90.0 percent compared to 75.0 percent for the smaller farms and this accounts for significantly lower capital interest paid for the larger farms. The capital costs and unpaid labour for the farms with 100 cows and less and over 100 cows, averaged $367.36 and $232.45 per cow, respectively. The production costs totalled $733.40 per cow for the smaller farms and $528.61 per cow for the larger farms.

As can be observed in Section D, the returns over cash costs for both size groups were similar, averaging approximately $185.00 per cow. Due to the lower labour costs for the larger size farms, their return to capital was significantly higher at $122.27 per cow compared to $82.06 per cow for the smaller farms. The smaller farms had returns insufficient of covering all production costs by $181.26 per cow while the larger farms were short by $48.12 per cow.

TABLE 9: SUMMARY OF COSTS AND RETURNS FOR THE COW-CALF ENTERPRISE - BY SIZE OF HEAD
BARRHEAD REGION - 1984

	100 Cows and Less	Over 100 Cows
Number of Farms	7	8
Average number of Cows	67.14	137.12
Average Selling Weight	781.33	790.05
	------ $ per cow ------	
A. VALUE OF PRODUCTION		
Sale of Production Stock	377.85	338.94
Net Sales of Cows/Bulls	23.98	-9.23
Inventory Adjustment	147.07	146.95
Miscellaneous Receipts	3.74	3.83
TOTAL	552.64	480.49
B. CASH COSTS		
Homegrown Feed (Cash)	199.60	146.97
Purchased Feed	55.47	40.36
Equipment, Fuel and Repairs	39.36	33.54
Vet., Medicine	13.44	14.75
Operating Interest Paid	12.79	11.50
Miscellaneous	45.88	49.04
TOTAL	366.54	296.16
C. CAPITAL COSTS AND UNPAID LABOUR		
Depreciation	40.75	34.66
Capital Interest Paid	27.21	8.21
Homegrown Feed (Non-Cash)	195.36	127.53
Operator and Family Labour	104.04	62.05
TOTAL	367.36	232.45
D. MANAGEMENT INDICATORS		
Returns Over Cash Costs	186.10	184.33
Return to Capital	82.06	122.27
Return to Equity	-181.26	-48.12
Labour Hours Per Cow	16.01	11.96
Weaning Percentage	93.19	91.70
Equity Percentage	74.97	90.01
E. INVESTMENT		
Breeding Stock	870.89	872.53
Improvements	232.55	185.34
Machinery	252.21	221.69
TOTAL	1355.66	1279.56

APPENDIX 1

CROPS BUDGETS - VERMILION REGION

Alberta AGRICULTURE

16 JULY 1985

CROP ENTERPRISE ANALYSIS

ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

BARLEY - OWNED LAND (20 ENTERPRISES)

GROUP AVERAGE

			TOTAL	PER ACRE	PER BUSHEL
	CROP VALUE	243.79 ACRES	31983.68	131.19	2.60
	CROP INSURANCE RECEIPTS				
	MISCELLANEOUS RECEIPTS		1657.58	6.80	
A.	VALUE OF PRODUCTION		33641.26	137.99	2.73
B.	CASH COSTS				
	FERTILIZER		4435.68	18.19	
	CHEMICALS		2306.95	9.46	
	SEED		1370.05	5.62	
	CUSTOM WORK HIRED		616.47	2.53	
	CROP AND HAIL INSURANCE		284.84	1.17	
	MACHINERY-FUEL		2158.21	8.85	
	MACHINERY-REPAIRS		1986.58	8.15	
	MISCELLANEOUS EQUIPMENT				
	BUILDING REPAIRS		253.05	1.04	
	UTILITIES		437.26	1.79	
	OPERATING INTEREST PAID		463.63	1.90	
	ACCOUNTING AND LEGAL		248.37	1.02	
	OTHER		177.89	0.73	
	HIRED LABOUR		383.11	1.57	
	TOOLS PURCHASED		275.84	1.13	
	TAXES AND INSURANCE		791.21	3.25	
	TOTAL CASH COSTS		16189.16	66.41	1.32
C.	CAPITAL COSTS & UNPAID LABOUR				
	CASH RENT AND CROP SHARE				
	DEPRECIATION-IMPROVEMENTS		588.26	2.41	
	DEPRECIATION-MACHINERY		4198.58	17.22	
	CAPITAL INTEREST PAID		3316.79	13.61	
	OPERATOR AND FAMILY LABOUR		2996.16	12.29	
	TOTAL CAPITAL COSTS		11099.79	45.53	0.90
	TOTAL PRODUCTION COSTS		27288.95	111.94	2.22
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		17452.10	71.59	1.42
	RETURN TO CAPITAL(CONT.MARGIN)		14455.95	59.30	1.18
	RETURN TO EQUITY	2.58 %	6352.31	26.06	0.52
	YIELD (BUSHELS)		12301.42	50.46	
	LABOUR HOURS		528.74	2.17	
	EQUITY (%)		78.43		
	DEBT CAPACITY		98457.69	403.86	
	PRODUCTIVE VALUE OF LAND		83345.37	341.87	
E.	INVESTMENT				
	LAND		116424.12	477.56	
	MACHINERY		39887.32	163.61	
	BUILDINGS AND IMPROVEMENTS		11338.21	46.51	
	TOTAL INVESTMENT		167649.87	687.68	

Alberta AGRICULTURE

16 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION
BARLEY - RENTED LAND (9 ENTERPRISES)
GROUP AVERAGE

			TOTAL	PER ACRE	PER BUSHEL
	CROP VALUE	347.33 ACRES	33631.00	96.83	2.60
	CROP INSURANCE RECEIPTS		335.11	0.96	
	MISCELLANEOUS RECEIPTS		1280.11	3.69	
A.	VALUE OF PRODUCTION		35246.22	101.48	2.73
B.	CASH COSTS				
	FERTILIZER		8647.89	24.90	
	CHEMICALS		2493.44	7.18	
	SEED		2151.11	6.19	
	CUSTOM WORK HIRED		456.78	1.32	
	CROP AND HAIL INSURANCE		1054.33	3.04	
	MACHINERY-FUEL		3838.67	11.05	
	MACHINERY-REPAIRS		2555.44	7.36	
	MISCELLANEOUS EQUIPMENT				
	BUILDING REPAIRS		15.22	0.04	
	UTILITIES		413.78	1.19	
	OPERATING INTEREST PAID		1156.44	3.33	
	ACCOUNTING AND LEGAL		238.11	0.69	
	OTHER		635.56	1.83	
	HIRED LABOUR		844.22	2.43	
	TOOLS PURCHASED		375.56	1.08	
	TAXES AND INSURANCE		545.56	1.57	
	TOTAL CASH COSTS		25422.11	73.19	1.97
C.	CAPITAL COSTS & UNPAID LABOUR				
	CASH RENT AND CROP SHARE		7211.22	20.76	
	DEPRECIATION-IMPROVEMENTS		688.56	1.98	
	DEPRECIATION-MACHINERY		4683.55	13.48	
	CAPITAL INTEREST PAID		1261.11	3.63	
	OPERATOR AND FAMILY LABOUR		3660.78	10.54	
	TOTAL CAPITAL COSTS		17505.22	50.40	1.35
	TOTAL PRODUCTION COSTS		42927.33	123.59	3.32
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		9824.11	28.28	0.76
	RETURN TO CAPITAL(CONT.MARGIN)		6163.33	17.74	0.48
	RETURN TO EQUITY	-16.40 %	-7681.11	-22.11	-0.59
	YIELD (BUSHELS)		12926.44	37.22	
	LABOUR HOURS		721.00	2.08	
	EQUITY (%)		61.67		
	DEBT CAPACITY		-7137.07	-20.55	
	PRODUCTIVE VALUE OF LAND		1935.71	5.57	
E.	INVESTMENT				
	LAND				
	MACHINERY		44495.11	128.10	
	BUILDINGS AND IMPROVEMENTS		11305.44	32.55	
	TOTAL INVESTMENT		55800.55	160.65	

Alberta AGRICULTURE

16 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

OATS GROUP AVERAGE
OWNED LAND (14 ENTERPRISES)

		TOTAL	PER ACRE	PER BUSHEL
CROP VALUE	136.23 ACRES	14463.69	106.17	1.80
CROP INSURANCE RECEIPTS		169.23	1.24	
MISCELLANEOUS RECEIPTS		564.92	4.15	
A. VALUE OF PRODUCTION		15197.84	111.56	1.89
B. CASH COSTS				
FERTILIZER		1741.23	12.78	
CHEMICALS		361.69	2.65	
SEED		783.08	5.75	
CUSTOM WORK HIRED		126.62	0.93	
CROP AND HAIL INSURANCE		94.15	0.69	
MACHINERY-FUEL		1621.77	11.90	
MACHINERY-REPAIRS		1491.92	10.95	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		43.92	0.32	
UTILITIES		191.77	1.41	
OPERATING INTEREST PAID		450.38	3.31	
ACCOUNTING AND LEGAL		110.23	0.81	
OTHER		13.77	0.10	
HIRED LABOUR		118.38	0.87	
TOOLS PURCHASED		141.85	1.04	
TAXES AND INSURANCE		377.92	2.77	
TOTAL CASH COSTS		7668.69	56.29	0.95
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE				
DEPRECIATION-IMPROVEMENTS		384.46	2.68	
DEPRECIATION-MACHINERY		2877.31	21.12	
CAPITAL INTEREST PAID		1254.23	9.21	
OPERATOR AND FAMILY LABOUR		2120.31	15.56	
TOTAL CAPITAL COSTS		6816.30	48.57	0.82
TOTAL PRODUCTION COSTS		14285.00	104.86	1.78
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		7529.15	55.27	0.94
RETURN TO CAPITAL(CONT.MARGIN)		5408.84	39.70	0.67
RETURN TO EQUITY	2.45 %	912.85	6.70	0.11
YIELD (BUSHELS)		8035.38	58.98	
LABOUR HOURS		343.31	2.52	
EQUITY (%)		78.62		
DEBT CAPACITY		36839.09	270.42	
PRODUCTIVE VALUE OF LAND		13478.75	98.94	
E. INVESTMENT				
LAND		65100.23	477.87	
MACHINERY		27332.92	200.64	
BUILDINGS AND IMPROVEMENTS		7107.61	52.17	
TOTAL INVESTMENT		99540.75	730.68	

Alberta AGRICULTURE

16 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

MIXED GRAIN GROUP AVERAGE
(4 ENTERPRISES)

		TOTAL	PER ACRE	PER BUSHEL
CROP VALUE	90.75 ACRES	7140.00	78.68	2.20
CROP INSURANCE RECEIPTS		500.00	5.51	
MISCELLANEOUS RECEIPTS		481.75	5.31	
A. VALUE OF PRODUCTION		8121.75	89.50	2.50
B. CASH COSTS				
FERTILIZER		1396.75	15.39	
CHEMICALS				
SEED		550.50	6.07	
CUSTOM WORK HIRED				
CROP AND HAIL INSURANCE		81.75	0.90	
MACHINERY-FUEL		1099.25	12.11	
MACHINERY-REPAIRS		719.75	7.93	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		8.00	0.09	
UTILITIES		64.75	0.71	
OPERATING INTEREST PAID		805.75	8.88	
ACCOUNTING AND LEGAL		65.00	0.72	
OTHER				
HIRED LABOUR		62.00	0.68	
TOOLS PURCHASED		18.25	0.20	
TAXES AND INSURANCE		275.50	3.04	
TOTAL CASH COSTS		5147.25	56.72	1.59
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE		849.25	9.36	
DEPRECIATION-IMPROVEMENTS		127.25	1.40	
DEPRECIATION-MACHINERY		991.75	10.93	
CAPITAL INTEREST PAID		1010.00	11.13	
OPERATOR AND FAMILY LABOUR		806.50	8.89	
TOTAL CAPITAL COSTS		3784.75	41.71	1.17
TOTAL PRODUCTION COSTS		8932.00	98.42	2.75
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		2974.50	32.78	0.92
RETURN TO CAPITAL(CONT.MARGIN)		2168.00	23.89	0.67
RETURN TO EQUITY	-31.75 %	-810.25	-8.93	-0.25
YIELD (BUSHELS)		3245.50	35.76	
LABOUR HOURS		136.50	1.50	
EQUITY (%)		50.35		
DEBT CAPACITY		8981.87	98.97	
PRODUCTIVE VALUE OF LAND		363.17	4.00	
E. INVESTMENT				
LAND		40238.25	443.40	
MACHINERY		9424.75	103.85	
BUILDINGS AND IMPROVEMENTS		2484.25	27.37	
TOTAL INVESTMENT		52147.25	574.63	

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15 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

FOR: STRAW
(25 ENTERPRISES)

			TOTAL	PER ACRE	PER TON
	CROP VALUE	277.91 ACRES	2799.78	10.07	15.00
	CROP INSURANCE RECEIPTS				
	MISCELLANEOUS RECEIPTS		173.48	0.62	
A.	VALUE OF PRODUCTION		2973.26	10.70	15.93
B.	CASH COSTS				
	FERTILIZER				
	CHEMICALS				
	SEED				
	CUSTOM WORK HIRED				
	CROP AND HAIL INSURANCE				
	MACHINERY-FUEL		550.43	1.98	
	MACHINERY-REPAIRS		485.04	1.75	
	MISCELLANEOUS EQUIPMENT				
	BUILDING REPAIRS		13.52	0.05	
	UTILITIES		12.96	0.05	
	OPERATING INTEREST PAID		50.57	0.18	
	ACCOUNTING AND LEGAL		2.78	0.01	
	OTHER		177.13	0.64	
	HIRED LABOUR		106.70	0.38	
	TOOLS PURCHASED		33.00	0.12	
	TAXES AND INSURANCE		10.61	0.04	
	TOTAL CASH COSTS		1442.74	5.19	7.73
C.	CAPITAL COSTS & UNPAID LABOUR				
	CASH RENT AND CROP SHARE				
	DEPRECIATION-IMPROVEMENTS		17.09	0.06	
	DEPRECIATION-MACHINERY		866.09	3.12	
	CAPITAL INTEREST PAID		51.48	0.19	
	OPERATOR AND FAMILY LABOUR		1140.48	4.10	
	TOTAL CAPITAL COSTS		2075.13	7.47	11.12
	TOTAL PRODUCTION COSTS		3517.87	12.66	18.85
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		1530.52	5.51	8.20
	RETURN TO CAPITAL(CONT.MARGIN)		390.04	1.40	2.09
	RETURN TO EQUITY	-19.94 %	-544.61	-1.96	-2.92
	YIELD TON		186.65	0.67	
	LABOUR HOURS		195.91	0.70	
	EQUITY (%)		79.40		
	DEBT CAPACITY		2656.54	9.56	
	PRODUCTIVE VALUE OF LAND		-4943.40	-17.79	
E.	INVESTMENT				
	LAND				
	MACHINERY		8914.95	32.08	
	BUILDINGS AND IMPROVEMENTS		333.35	1.20	
	TOTAL INVESTMENT		9248.30	33.28	

Alberta AGRICULTURE

16 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

	TAME PASTURE OWNED LAND	GROUP AVERAGE (23 ENTERPRISES)	TOTAL	PER ACRE	PER AUM
CROP VALUE		230.50 ACRES	1279.95	5.55	7.00
CROP INSURANCE RECEIPTS					
MISCELLANEOUS RECEIPTS			124.60	0.54	
A. VALUE OF PRODUCTION			1404.55	6.09	7.68
B. CASH COSTS					
FERTILIZER			409.40	1.78	
CHEMICALS					
SEED			10.00	0.04	
CUSTOM WORK HIRED			7.30	0.03	
CROP AND HAIL INSURANCE			6.70	0.03	
MACHINERY-FUEL			24.10	0.10	
MACHINERY-REPAIRS			7.75	0.03	
MISCELLANEOUS EQUIPMENT					
BUILDING REPAIRS			172.70	0.75	
UTILITIES			22.40	0.10	
OPERATING INTEREST PAID			120.55	0.52	
ACCOUNTING AND LEGAL			2.80	0.01	
OTHER			11.20	0.05	
HIRED LABOUR			29.55	0.13	
TOOLS PURCHASED			21.70	0.09	
TAXES AND INSURANCE			339.55	1.47	
TOTAL CASH COSTS			1185.70	5.14	6.48
C. CAPITAL COSTS & UNPAID LABOUR					
CASH RENT AND CROP SHARE					
DEPRECIATION-IMPROVEMENTS			233.40	1.01	
DEPRECIATION-MACHINERY			32.85	0.14	
CAPITAL INTEREST PAID			1288.65	5.59	
OPERATOR AND FAMILY LABOUR			315.85	1.37	
TOTAL CAPITAL COSTS			1870.75	8.12	10.23
TOTAL PRODUCTION COSTS			3056.45	13.26	16.72
D. MANAGEMENT INDICATORS					
RETURN OVER CASH COSTS			218.85	0.95	1.20
RETURN TO CAPITAL(CONT.MARGIN)			-97.00	-0.42	-0.53
RETURN TO EQUITY		-4.22 %	-1651.90	-7.17	-9.03
YIELD AUM			182.85	0.79	
LABOUR HOURS			54.80	0.24	
EQUITY (%)			77.53		
DEBT CAPACITY			-660.66	-2.87	
PRODUCTIVE VALUE OF LAND			-9123.18	-39.58	
E. INVESTMENT					
LAND			109008.75	472.92	
MACHINERY			308.40	1.34	
BUILDINGS AND IMPROVEMENTS			4467.30	19.38	
TOTAL INVESTMENT			113784.50	493.64	

Alberta AGRICULTURE

16 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

NATIVE PASTURE GROUP AVERAGE
OWNED LAND (25 ENTERPRISES)

		TOTAL	PER ACRE	PER AUM
CROP VALUE	698.54 ACRES	2648.96	3.79	7.00
CROP INSURANCE RECEIPTS				
MISCELLANEOUS RECEIPTS		96.29	0.14	
A. VALUE OF PRODUCTION		2745.25	3.93	7.26
B. CASH COSTS				
FERTILIZER		80.63	0.12	
CHEMICALS				
SEED				
CUSTOM WORK HIRED				
CROP AND HAIL INSURANCE				
MACHINERY-FUEL		20.67	0.03	
MACHINERY-REPAIRS		8.92	0.01	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		334.04	0.48	
UTILITIES		32.79	0.05	
OPERATING INTEREST PAID		118.54	0.17	
ACCOUNTING AND LEGAL		4.83	0.01	
OTHER				
HIRED LABOUR		54.54	0.08	
TOOLS PURCHASED		55.33	0.08	
TAXES AND INSURANCE		420.25	0.60	
TOTAL CASH COSTS		1130.75	1.62	2.99
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE				
DEPRECIATION-IMPROVEMENTS				
DEPRECIATION-MACHINERY		34.63	0.05	
CAPITAL INTEREST PAID		1312.54	1.88	
OPERATOR AND FAMILY LABOUR		846.75	1.21	
TOTAL CAPITAL COSTS		2193.92	3.14	5.80
TOTAL PRODUCTION COSTS		3324.67	4.76	8.79
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		1614.50	2.31	4.27
RETURN TO CAPITAL(CONT.MARGIN)		767.75	1.10	2.03
RETURN TO EQUITY	-3.01 %	-579.42	-0.83	-1.53
YIELD AUM		378.37	0.54	
LABOUR HOURS		141.83	0.20	
EQUITY (%)		73.15		
DEBT CAPACITY		5229.05	7.49	
PRODUCTIVE VALUE OF LAND		2565.90	3.67	
E. INVESTMENT				
LAND		96382.50	137.98	
MACHINERY		337.12	0.48	
BUILDINGS AND IMPROVEMENTS				
TOTAL INVESTMENT		96719.62	138.46	

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16 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

	TAME HAY OWNED LAND	GROUP AVERAGE (26 ENTERPRISES)	TOTAL	PER ACRE	PER TON
CROP VALUE		148.78 ACRES	14291.61	96.06	60.26
CROP INSURANCE RECEIPTS			91.30	0.61	
MISCELLANEOUS RECEIPTS			377.48	2.54	
A. VALUE OF PRODUCTION			14760.39	99.21	62.23
B. CASH COSTS					
FERTILIZER			973.39	6.54	
CHEMICALS					
SEED			87.57	0.59	
CUSTOM WORK HIRED			41.22	0.28	
CROP AND HAIL INSURANCE			18.04	0.12	
MACHINERY-FUEL			765.78	5.15	
MACHINERY-REPAIRS			680.39	4.57	
MISCELLANEOUS EQUIPMENT					
BUILDING REPAIRS			45.83	0.31	
UTILITIES			87.22	0.59	
OPERATING INTEREST PAID			281.65	1.89	
ACCOUNTING AND LEGAL			65.22	0.44	
OTHER			223.17	1.50	
HIRED LABOUR			114.57	0.77	
TOOLS PURCHASED			72.30	0.49	
TAXES AND INSURANCE			363.09	2.44	
TOTAL CASH COSTS			3819.43	25.67	16.10
C. CAPITAL COSTS & UNPAID LABOUR					
CASH RENT AND CROP SHARE					
DEPRECIATION-IMPROVEMENTS			330.78	2.22	
DEPRECIATION-MACHINERY			1306.96	8.78	
CAPITAL INTEREST PAID			1321.04	8.88	
OPERATOR AND FAMILY LABOUR			1344.39	9.04	
TOTAL CAPITAL COSTS			4303.17	28.92	18.14
TOTAL PRODUCTION COSTS			8122.61	54.59	34.25
D. MANAGEMENT INDICATORS					
RETURN OVER CASH COSTS			10940.95	73.54	46.13
RETURN TO CAPITAL(CONT.MARGIN)			9596.56	64.50	40.46
RETURN TO EQUITY		8.44 %	6637.78	44.61	27.99
YIELD TON			237.17	1.59	
LABOUR HOURS			231.35	1.55	
EQUITY (%)			75.47		
DEBT CAPACITY			65361.04	439.31	
PRODUCTIVE VALUE OF LAND			66872.62	449.47	
E. INVESTMENT					
LAND			75020.31	504.23	
MACHINERY			12742.39	85.64	
BUILDINGS AND IMPROVEMENTS			6297.61	42.33	
TOTAL INVESTMENT			94060.31	632.20	

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16 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

	SILAGE OWNED LAND	GROUP AVERAGE (7 ENTERPRISES)	TOTAL	PER ACRE	PER TON
CROP VALUE		203.71 ACRES	15848.57	77.80	60.00
CROP INSURANCE RECEIPTS					
MISCELLANEOUS RECEIPTS			462.29	2.27	
A. VALUE OF PRODUCTION			16310.86	80.07	61.75
B. CASH COSTS					
FERTILIZER			2058.71	10.11	
CHEMICALS			478.14	2.35	
SEED			804.00	3.95	
CUSTOM WORK HIRED			71.43	0.35	
CROP AND HAIL INSURANCE					
MACHINERY-FUEL			2026.86	9.95	
MACHINERY-REPAIRS			1325.00	6.50	
MISCELLANEOUS EQUIPMENT					
BUILDING REPAIRS					
UTILITIES			195.29	0.96	
OPERATING INTEREST PAID			411.14	2.02	
ACCOUNTING AND LEGAL			164.00	0.81	
OTHER			99.43	0.49	
HIRED LABOUR			144.00	0.71	
TOOLS PURCHASED			245.86	1.21	
TAXES AND INSURANCE			699.29	3.43	
TOTAL CASH COSTS			8723.14	42.82	33.02
C. CAPITAL COSTS & UNPAID LABOUR					
CASH RENT AND CROP SHARE					
DEPRECIATION-IMPROVEMENTS			408.43	2.00	
DEPRECIATION-MACHINERY			2997.29	14.71	
CAPITAL INTEREST PAID			2981.86	14.64	
OPERATOR AND FAMILY LABOUR			1741.14	8.55	
TOTAL CAPITAL COSTS			8128.71	39.90	30.77
TOTAL PRODUCTION COSTS			16851.86	82.72	63.80
D. MANAGEMENT INDICATORS					
RETURN OVER CASH COSTS			7587.71	37.25	28.73
RETURN TO CAPITAL(CONT.MARGIN)			5846.57	28.70	22.13
RETURN TO EQUITY	-7.61 %		-541.00	-2.66	-2.05
YIELD TON			264.14	1.30	
LABOUR HOURS			296.71	1.46	
EQUITY (%)			52.91		
DEBT CAPACITY			39820.38	195.47	
PRODUCTIVE VALUE OF LAND			6610.82	32.45	
E. INVESTMENT					
LAND			94824.56	465.48	
MACHINERY			28467.00	139.74	
BUILDINGS AND IMPROVEMENTS			7805.00	38.31	
TOTAL INVESTMENT			131096.56	643.53	

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16 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION

GREENFEED GROUP AVERAGE
OWNED LAND (9 ENTERPRISES) 75.00 ACRES

		TOTAL	PER ACRE	PER TON
CROP VALUE		3620.00	48.27	45.00
CROP INSURANCE RECEIPTS		333.33	4.44	
MISCELLANEOUS RECEIPTS		687.56	9.17	
A. VALUE OF PRODUCTION		4640.89	61.88	57.69
B. CASH COSTS				
FERTILIZER		746.67	9.96	
CHEMICALS		17.89	0.24	
SEED		682.44	9.10	
CUSTOM WORK HIRED		20.33	0.27	
CROP AND HAIL INSURANCE		91.78	1.22	
MACHINERY-FUEL		625.67	8.34	
MACHINERY-REPAIRS		497.11	6.63	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		27.22	0.36	
UTILITIES		56.11	0.75	
OPERATING INTEREST PAID		448.00	5.97	
ACCOUNTING AND LEGAL		31.78	0.42	
OTHER		122.11	1.63	
HIRED LABOUR		15.11	0.20	
TOOLS PURCHASED		36.89	0.49	
TAXES AND INSURANCE		210.22	2.80	
TOTAL CASH COSTS		3629.33	48.39	45.12
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE				
DEPRECIATION-IMPROVEMENTS		130.56	1.74	
DEPRECIATION-MACHINERY		1388.22	18.51	
CAPITAL INTEREST PAID		740.78	9.88	
OPERATOR AND FAMILY LABOUR		626.33	8.35	
TOTAL CAPITAL COSTS		2885.89	38.48	35.87
TOTAL PRODUCTION COSTS		6515.22	86.87	80.99
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		1011.56	13.49	12.57
RETURN TO CAPITAL(CONT.MARGIN)		385.22	5.14	4.79
RETURN TO EQUITY	-5.15 %	-1874.33	-24.99	-23.30
YIELD TON		80.44	1.07	
LABOUR HOURS		99.33	1.32	
EQUITY (%)		82.23		
DEBT CAPACITY		2623.71	34.98	
PRODUCTIVE VALUE OF LAND		-13917.71	-185.57	
E. INVESTMENT				
LAND		47096.33	627.95	
MACHINERY		13186.00	175.81	
BUILDINGS AND IMPROVEMENTS		2464.33	32.86	
TOTAL INVESTMENT		62746.66	836.62	

APPENDIX 2

CROPS BUDGETS - BARRHEAD REGION

Alberta AGRICULTURE

9 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: BARLEY
OWNED LAND (10 ENTERPRISES)

		TOTAL	PER ACRE	PER BUSHEL
CROP VALUE	131.40 ACRES	17930.60	136.46	2.60
CROP INSURANCE RECEIPTS				
MISCELLANEOUS RECEIPTS		224.50	1.71	
A. VALUE OF PRODUCTION		18155.10	138.17	2.63
B. CASH COSTS				
FERTILIZER		2599.40	19.78	
CHEMICALS		270.70	2.06	
SEED		609.10	4.64	
CUSTOM WORK HIRED		259.60	1.98	
CROP AND HAIL INSURANCE		633.20	4.82	
MACHINERY-FUEL		1174.60	8.94	
MACHINERY-REPAIRS		944.30	7.19	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		113.70	0.87	
UTILITIES		135.30	1.03	
OPERATING INTEREST PAID		607.19	4.62	
ACCOUNTING AND LEGAL		26.80	0.20	
OTHER		48.30	0.37	
HIRED LABOUR		351.70	2.68	
TOOLS PURCHASED		80.60	0.61	
TAXES AND INSURANCE		371.00	2.82	
TOTAL CASH COSTS		8225.49	62.60	1.19
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE				
DEPRECIATION-IMPROVEMENTS		291.90	2.22	
DEPRECIATION-MACHINERY		2678.10	20.38	
CAPITAL INTEREST PAID		1981.40	15.08	
OPERATOR AND FAMILY LABOUR		1892.00	14.40	
TOTAL CAPITAL COSTS		6843.40	52.08	0.99
TOTAL PRODUCTION COSTS		15068.89	114.68	2.19
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		9929.60	75.57	1.44
RETURN TO CAPITAL(CONT MARGIN)		8037.60	61.17	1.17
RETURN TO EQUITY	3.46 %	3086.21	23.49	0.45
YIELD (BUSHELS)		6896.40	52.48	
LABOUR HOURS		378.00	2.88	
EQUITY (%)		81.60		
DEBT CAPACITY		54743.29	416.62	
PRODUCTIVE VALUE OF LAND		38970.41	296.58	
E. INVESTMENT				
LAND		59361.50	451.76	
MACHINERY		30224.20	230.02	
BUILDINGS AND IMPROVEMENTS		5733.40	43.63	
TOTAL INVESTMENT		95319.08	725.41	

Alberta AGRICULTURE

9 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: BARLEY
RENTED LAND (5 ENTERPRISES) 90.60 ACRES

		TOTAL	PER ACRE	PER BUSHEL
CROP VALUE		12969.80	143.15	2.60
CROP INSURANCE RECEIPTS				
MISCELLANEOUS RECEIPTS				
A. VALUE OF PRODUCTION		12969.80	143.15	2.60
B. CASH COSTS				
FERTILIZER		1643.80	18.14	
CHEMICALS		338.00	3.73	
SEED		446.60	4.93	
CUSTOM WORK HIRED		51.80	0.57	
CROP AND HAIL INSURANCE		33.80	0.37	
MACHINERY-FUEL		600.80	6.63	
MACHINERY-REPAIRS		710.40	7.84	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		109.60	1.21	
UTILITIES		118.60	1.31	
OPERATING INTEREST PAID		417.40	4.61	
ACCOUNTING AND LEGAL		68.00	0.75	
OTHER				
HIRED LABOUR		323.60	3.57	
TOOLS PURCHASED		54.40	0.60	
TAXES AND INSURANCE		47.00	0.52	
TOTAL CASH COSTS		4963.80	54.79	1.00
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE		1159.80	12.80	
DEPRECIATION-IMPROVEMENTS		155.60	1.72	
DEPRECIATION-MACHINERY		1543.40	17.04	
CAPITAL INTEREST PAID		359.20	3.96	
OPERATOR AND FAMILY LABOUR		1574.20	17.38	
TOTAL CAPITAL COSTS		4792.20	52.89	0.96
TOTAL PRODUCTION COSTS		9756.00	107.68	1.96
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		8006.00	88.37	1.60
RETURN TO CAPITAL(CONT.MARGIN)		6431.80	70.99	1.29
RETURN TO EQUITY	24.21 %	3213.80	35.47	0.64
YIELD (BUSHELS)		4988.40	55.06	
LABOUR HOURS		330.00	3.64	
EQUITY (%)		82.34		
DEBT CAPACITY		35907.02	396.32	
PRODUCTIVE VALUE OF LAND		41656.65	459.79	
E. INVESTMENT				
LAND				
MACHINERY		13862.40	153.01	
BUILDINGS AND IMPROVEMENTS		2947.60	32.53	
TOTAL INVESTMENT		16810.00	185.54	

Alberta AGRICULTURE

9 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: OATS
OWNED LAND (11 ENTERPRISES) 55.73 ACRES

		TOTAL	PER ACRE	PER BUSHEL
	CROP VALUE	7861.73	141.08	1.80
	CROP INSURANCE RECEIPTS			
	MISCELLANEOUS RECEIPTS	59.82	1.07	
A.	VALUE OF PRODUCTION	7921.54	142.15	1.81
B.	CASH COSTS			
	FERTILIZER	911.09	16.35	
	CHEMICALS	88.64	1.59	
	SEED	236.00	4.23	
	CUSTOM WORK HIRED	36.00	0.65	
	CROP AND HAIL INSURANCE	77.00	1.38	
	MACHINERY-FUEL	415.18	7.45	
	MACHINERY-REPAIRS	385.82	6.92	
	MISCELLANEOUS EQUIPMENT			
	BUILDING REPAIRS	56.00	1.00	
	UTILITIES	66.18	1.19	
	OPERATING INTEREST PAID	117.42	2.11	
	ACCOUNTING AND LEGAL	10.45	0.19	
	OTHER	2.55	0.05	
	HIRED LABOUR	111.45	2.00	
	TOOLS PURCHASED	34.27	0.62	
	TAXES AND INSURANCE	159.00	2.85	
	TOTAL CASH COSTS	2707.05	48.58	0.62
C.	CAPITAL COSTS & UNPAID LABOUR			
	CASH RENT AND CROP SHARE			
	DEPRECIATION-IMPROVEMENTS	176.55	3.17	
	DEPRECIATION-MACHINERY	1072.18	19.24	
	CAPITAL INTEREST PAID	582.09	10.45	
	OPERATOR AND FAMILY LABOUR	1340.55	24.06	
	TOTAL CAPITAL COSTS	3171.36	56.91	0.73
	TOTAL PRODUCTION COSTS	5878.42	105.49	1.35
D.	MANAGEMENT INDICATORS			
	RETURN OVER CASH COSTS	5214.49	93.57	1.19
	RETURN TO CAPITAL(CONT.MARGIN)	3873.95	69.52	0.89
	RETURN TO EQUITY 3.88 %	2043.13	36.66	0.47
	YIELD (BUSHELS)	4367.63	78.38	
	LABOUR HOURS	230.00	4.13	
	EQUITY (%)	81.72		
	DEBT CAPACITY	26385.03	473.47	
	PRODUCTIVE VALUE OF LAND	21999.55	394.77	
E.	INVESTMENT			
	LAND	23763.00	426.42	
	MACHINERY	11682.45	209.64	
	BUILDINGS AND IMPROVEMENTS	3210.64	57.61	
	TOTAL INVESTMENT	38656.09	693.67	

Alberta AGRICULTURE

9 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: OATS
RENTED LAND (5 ENTERPRISES)
83.00 ACRES

		TOTAL	PER ACRE	PER BUSHEL
CROP VALUE		9711.00	117.00	1.80
CROP INSURANCE RECEIPTS				
MISCELLANEOUS RECEIPTS				
A. VALUE OF PRODUCTION		9711.00	117.00	1.80
B. CASH COSTS				
FERTILIZER		1194.00	14.39	
CHEMICALS		246.80	2.97	
SEED		411.90	4.96	
CUSTOM WORK HIRED		241.80	2.91	
CROP AND HAIL INSURANCE		101.40	1.22	
MACHINERY-FUEL		612.80	7.38	
MACHINERY-REPAIRS		488.20	5.88	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		52.80	0.64	
UTILITIES		72.20	0.87	
OPERATING INTEREST PAID		479.60	5.78	
ACCOUNTING AND LEGAL		30.40	0.37	
OTHER				
HIRED LABOUR		359.00	4.33	
TOOLS PURCHASED		45.20	0.54	
TAXES AND INSURANCE		63.40	0.76	
TOTAL CASH COSTS		4399.50	53.01	0.82
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE		1043.00	12.57	
DEPRECIATION-IMPROVEMENTS		186.20	2.24	
DEPRECIATION-MACHINERY		1969.00	23.72	
CAPITAL INTEREST PAID		167.20	2.01	
OPERATOR AND FAMILY LABOUR		1392.00	16.77	
TOTAL CAPITAL COSTS		4757.40	57.32	0.88
TOTAL PRODUCTION COSTS		9156.90	110.32	1.70
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		5311.50	63.99	0.98
RETURN TO CAPITAL(CONT.MARGIN)		3919.50	47.22	0.73
RETURN TO EQUITY	25.91 %	554.10	6.68	0.10
YIELD (BUSHELS)		5395.00	65.00	
LABOUR HOURS		336.40	4.05	
EQUITY (%)		82.36		
DEBT CAPACITY		13591.52	236.04	
PRODUCTIVE VALUE OF LAND		15316.21	184.53	
E. INVESTMENT				
LAND				
MACHINERY		18651.60	224.72	
BUILDINGS AND IMPROVEMENTS		3332.80	40.15	
TOTAL INVESTMENT		21984.40	264.87	

APPENDIX 2 TABLE

Alberta AGRICULTURE

9 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: STRAW
(16 ENTERPRISES)

			TOTAL	PER ACRE	PER TON
	CROP VALUE	155.80 ACRES	2065.00	13.25	15.00
	CROP INSURANCE RECEIPTS				
	MISCELLANEOUS RECEIPTS				
A.	VALUE OF PRODUCTION		2065.00	13.25	15.00
B.	CASH COSTS				
	FERTILIZER				
	CHEMICALS				
	SEED				
	CUSTOM WORK HIRED				
	CROP AND HAIL INSURANCE				
	MACHINERY-FUEL		358.17	2.30	
	MACHINERY-REPAIRS		362.57	2.33	
	MISCELLANEOUS EQUIPMENT				
	BUILDING REPAIRS		21.40	0.14	
	UTILITIES		30.87	0.20	
	OPERATING INTEREST PAID		89.47	0.57	
	ACCOUNTING AND LEGAL		11.87	0.08	
	OTHER		75.33	0.48	
	HIRED LABOUR		79.07	0.51	
	TOOLS PURCHASED		38.13	0.24	
	TAXES AND INSURANCE		30.47	0.20	
	TOTAL CASH COSTS		1097.33	7.04	7.97
C.	CAPITAL COSTS & UNPAID LABOUR				
	CASH RENT AND CROP SHARE				
	DEPRECIATION-IMPROVEMENTS		16.00	0.10	
	DEPRECIATION-MACHINERY		563.20	3.61	
	CAPITAL INTEREST PAID				
	OPERATOR AND FAMILY LABOUR		499.67	3.21	
	TOTAL CAPITAL COSTS		1078.87	6.92	7.84
	TOTAL PRODUCTION COSTS		2176.20	13.97	15.81
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		967.67	6.21	7.03
	RETURN TO CAPITAL(CONT.MARGIN)		468.00	3.00	3.40
	RETURN TO EQUITY	33.92 %	-111.20	-0.71	-0.81
	YIELD TON		137.67	0.88	
	LABOUR HOURS		88.40	0.57	
	EQUITY (%)		73.21		
	DEBT CAPACITY		3187.50	20.46	
	PRODUCTIVE VALUE OF LAND		-1009.36	-6.48	
E.	INVESTMENT				
	LAND				
	MACHINERY		5343.46	34.30	
	BUILDINGS AND IMPROVEMENTS		308.73	1.98	
	TOTAL INVESTMENT		5652.20	36.28	

Alberta AGRICULTURE

9 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: PASTURE

	OWNED LAND (17 ENTERPRISES)	TOTAL	PER ACRE	PER AUM
CROP VALUE	199.25 ACRES	2358.56	11.84	7.00
CROP INSURANCE RECEIPTS				
MISCELLANEOUS RECEIPTS		31.88	0.16	
A. VALUE OF PRODUCTION		2390.44	12.00	7.09
B. CASH COSTS				
FERTILIZER		817.87	4.10	
CHEMICALS		4.38	0.02	
SEED		10.56	0.05	
CUSTOM WORK HIRED		217.69	1.09	
CROP AND HAIL INSURANCE				
MACHINERY-FUEL		141.00	0.71	
MACHINERY-REPAIRS		94.56	0.47	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		131.69	0.66	
UTILITIES		196.44	0.99	
OPERATING INTEREST PAID		95.75	0.48	
ACCOUNTING AND LEGAL		57.88	0.29	
OTHER		2.00	0.01	
HIRED LABOUR		13.25	0.07	
TOOLS PURCHASED		54.88	0.28	
TAXES AND INSURANCE		550.00	2.76	
TOTAL CASH COSTS		2387.94	11.98	7.09
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE				
DEPRECIATION-IMPROVEMENTS		428.25	2.15	
DEPRECIATION-MACHINERY		305.31	1.53	
CAPITAL INTEREST PAID		1791.94	8.99	
OPERATOR AND FAMILY LABOUR		197.44	0.99	
TOTAL CAPITAL COSTS		2722.94	13.67	8.08
TOTAL PRODUCTION COSTS		5110.87	25.65	15.17
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		2.50	0.01	0.01
RETURN TO CAPITAL(CONT.MARGIN)		-194.94	-0.98	-0.58
RETURN TO EQUITY	-5.44 %	-2720.44	-13.65	-8.07
YIELD AUM		336.94	1.69	
LABOUR HOURS		34.56	0.17	
EQUITY (%)		108.26		
DEBT CAPACITY		-1327.70	-6.66	
PRODUCTIVE VALUE OF LAND		-13505.37	-67.78	
E. INVESTMENT				
LAND		70809.50	355.38	
MACHINERY		2189.81	10.99	
BUILDINGS AND IMPROVEMENTS		8618.62	43.26	
TOTAL INVESTMENT		81617.94	409.63	

Alberta AGRICULTURE

9 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: PASTURE

	RENTED LAND (10 ENTERPRISES)	TOTAL	PER ACRE	PER AUM
CROP VALUE	265.50 ACRES	1739.50	6.55	7.00
CROP INSURANCE RECEIPTS				
MISCELLANEOUS RECEIPTS		28.50	0.11	
A. VALUE OF PRODUCTION		1768.00	6.66	7.11
B. CASH COSTS				
FERTILIZER		290.00	1.09	
CHEMICALS				
SEED				
CUSTOM WORK HIRED		62.30	0.23	
CROP AND HAIL INSURANCE				
MACHINERY-FUEL		137.50	0.52	
MACHINERY-REPAIRS		48.20	0.18	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		92.40	0.35	
UTILITIES		74.60	0.28	
OPERATING INTEREST PAID		172.80	0.65	
ACCOUNTING AND LEGAL		62.80	0.24	
OTHER		2.20	0.01	
HIRED LABOUR		6.00	0.02	
TOOLS PURCHASED		11.30	0.04	
TAXES AND INSURANCE		66.90	0.25	
TOTAL CASH COSTS		1027.00	3.87	4.13
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE		1722.10	6.49	
DEPRECIATION-IMPROVEMENTS		214.50	0.81	
DEPRECIATION-MACHINERY		148.00	0.56	
CAPITAL INTEREST PAID				
OPERATOR AND FAMILY LABOUR		230.10	0.87	
TOTAL CAPITAL COSTS		2314.70	8.72	9.31
TOTAL PRODUCTION COSTS		3341.70	12.59	13.45
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		741.00	2.79	2.98
RETURN TO CAPITAL(CONT.MARGIN)		510.90	1.92	2.06
RETURN TO EQUITY	-9.43 %	-1573.70	-5.93	-6.33
YIELD AUM		248.50	0.94	
LABOUR HOURS		41.30	0.16	
EQUITY (%)		69.90		
DEBT CAPACITY		-8249.35	-31.07	
PRODUCTIVE VALUE OF LAND		1347.03	5.07	
E. INVESTMENT				
LAND				
MACHINERY		930.80	3.51	
BUILDINGS AND IMPROVEMENTS		4247.20	16.00	
TOTAL INVESTMENT		5178.00	19.50	

Alberta AGRICULTURE

9 JULY 1985

CROP ENTERPRISE ANALYSIS

ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: TAME HAY

	OWNED LAND (16 ENTERPRISES)	TOTAL	PER ACRE	PER TON
	189.40 ACRES			
CROP VALUE		18289.00	96.56	60.00
CROP INSURANCE RECEIPTS				
MISCELLANEOUS RECEIPTS		30.00	0.16	
A. VALUE OF PRODUCTION		18319.00	96.72	60.10
B. CASH COSTS				
FERTILIZER		1033.20	5.46	
CHEMICALS				
SEED		346.60	1.83	
CUSTOM WORK HIRED		202.07	1.07	
CROP AND HAIL INSURANCE				
MACHINERY-FUEL		1141.60	6.03	
MACHINERY-REPAIRS		992.60	5.24	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		139.53	0.74	
UTILITIES		186.53	0.98	
OPERATING INTEREST PAID		386.20	2.04	
ACCOUNTING AND LEGAL		47.20	0.25	
OTHER		236.60	1.25	
HIRED LABOUR		233.53	1.23	
TOOLS PURCHASED		111.93	0.59	
TAXES AND INSURANCE		556.53	2.94	
TOTAL CASH COSTS		5614.13	29.64	18.42
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE				
DEPRECIATION-IMPROVEMENTS		501.67	2.65	
DEPRECIATION-MACHINERY		1555.47	8.21	
CAPITAL INTEREST PAID		1945.87	10.27	
OPERATOR AND FAMILY LABOUR		1715.13	9.06	
TOTAL CAPITAL COSTS		5718.13	30.19	18.76
TOTAL PRODUCTION COSTS		11332.27	59.83	37.18
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		12704.86	67.08	41.68
RETURN TO CAPITAL(CONT.MARGIN)		10989.73	58.02	36.06
RETURN TO EQUITY	6.70 %	6986.73	36.89	22.92
YIELD TON		304.80	1.61	
LABOUR HOURS		325.80	1.72	
EQUITY (%)		77.60		
DEBT CAPACITY		74849.81	395.19	
PRODUCTIVE VALUE OF LAND		75727.69	399.83	
E. INVESTMENT				
LAND		73404.62	387.56	
MACHINERY		16211.66	85.59	
BUILDINGS AND IMPROVEMENTS		9419.13	49.73	
TOTAL INVESTMENT		99035.44	522.89	

Alberta AGRICULTURE

9 JULY 1985
CROP ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: TAME HAY
RENTED LAND (13 ENTERPRISES)

		TOTAL	PER ACRE	PER TON
CROP VALUE	187.36 ACRES	18612.27	99.34	60.00
CROP INSURANCE RECEIPTS				
MISCELLANEOUS RECEIPTS				
A. VALUE OF PRODUCTION		18612.27	99.34	60.00
B. CASH COSTS				
FERTILIZER		682.82	3.64	
CHEMICALS				
SEED		31.91	0.17	
CUSTOM WORK HIRED		48.18	0.26	
CROP AND HAIL INSURANCE				
MACHINERY-FUEL		1213.18	6.48	
MACHINERY-REPAIRS		961.55	5.13	
MISCELLANEOUS EQUIPMENT				
BUILDING REPAIRS		201.55	1.08	
UTILITIES		272.18	1.45	
OPERATING INTEREST PAID		766.09	4.09	
ACCOUNTING AND LEGAL		87.73	0.47	
OTHER		130.27	0.70	
HIRED LABOUR		473.91	2.53	
TOOLS PURCHASED		128.64	0.69	
TAXES AND INSURANCE		181.64	0.97	
TOTAL CASH COSTS		5179.63	27.64	16.70
C. CAPITAL COSTS & UNPAID LABOUR				
CASH RENT AND CROP SHARE		2905.27	15.51	
DEPRECIATION-IMPROVEMENTS		232.27	1.24	
DEPRECIATION-MACHINERY		1406.55	7.51	
CAPITAL INTEREST PAID		206.64	1.10	
OPERATOR AND FAMILY LABOUR		1159.73	6.19	
TOTAL CAPITAL COSTS		5910.45	31.55	19.05
TOTAL PRODUCTION COSTS		11090.09	59.19	35.75
D. MANAGEMENT INDICATORS				
RETURN OVER CASH COSTS		13432.63	71.69	43.31
RETURN TO CAPITAL(CONT.MARGIN)		12272.91	65.50	39.57
RETURN TO EQUITY	33.02 %	7522.18	40.15	24.25
YIELD TON		310.18	1.66	
LABOUR HOURS		320.91	1.71	
EQUITY (%)		81.49		
DEBT CAPACITY		63802.00	340.52	
PRODUCTIVE VALUE OF LAND		95654.44	510.53	
E. INVESTMENT				
LAND				
MACHINERY		13149.54	70.18	
BUILDINGS AND IMPROVEMENTS		4162.09	22.21	
TOTAL INVESTMENT		17311.63	92.40	

Alberta AGRICULTURE

9 JULY 1985

CROP ENTERPRISE ANALYSIS

ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION

FOR: GREENFEED

OWNED LAND (4 ENTERPRISES) 43.75 ACRES

		TOTAL	PER ACRE	PER TON
	CROP VALUE	2283.75	52.20	45.00
	CROP INSURANCE RECEIPTS			
	MISCELLANEOUS RECEIPTS			
A.	VALUE OF PRODUCTION	2283.75	52.20	45.00
B.	CASH COSTS			
	FERTILIZER	540.00	12.34	
	CHEMICALS	112.75	2.58	
	SEED	176.50	4.03	
	CUSTOM WORK HIRED	6.50	0.15	
	CROP AND HAIL INSURANCE			
	MACHINERY-FUEL	295.50	6.75	
	MACHINERY-REPAIRS	276.50	6.32	
	MISCELLANEOUS EQUIPMENT			
	BUILDING REPAIRS	46.00	1.05	
	UTILITIES	37.75	0.86	
	OPERATING INTEREST PAID	112.00	2.56	
	ACCOUNTING AND LEGAL	30.00	0.69	
	OTHER	26.75	0.61	
	HIRED LABOUR	120.75	2.76	
	TOOLS PURCHASED	14.50	0.33	
	TAXES AND INSURANCE	147.00	3.36	
	TOTAL CASH COSTS	1942.50	44.40	38.28
C.	CAPITAL COSTS & UNPAID LABOUR			
	CASH RENT AND CROP SHARE			
	DEPRECIATION-IMPROVEMENTS	96.75	2.21	
	DEPRECIATION-MACHINERY	584.25	13.35	
	CAPITAL INTEREST PAID	1028.00	23.50	
	OPERATOR AND FAMILY LABOUR	783.25	17.90	
	TOTAL CAPITAL COSTS	2492.25	56.97	49.11
	TOTAL PRODUCTION COSTS	4434.75	101.37	87.38
D.	MANAGEMENT INDICATORS			
	RETURN OVER CASH COSTS	341.25	7.80	6.72
	RETURN TO CAPITAL(CONT.MARGIN)	-442.00	-10.10	-8.71
	RETURN TO EQUITY -13.23 %	-2151.00	-49.17	-42.38
	YIELD TON	50.75	1.16	
	LABOUR HOURS	164.25	3.75	
	EQUITY (%)	75.14		
	DEBT CAPACITY	-3010.42	-68.81	
	PRODUCTIVE VALUE OF LAND	-14432.84	-329.89	
E.	INVESTMENT			
	LAND	17020.50	389.04	
	MACHINERY	5572.75	127.38	
	BUILDINGS AND IMPROVEMENTS	1767.50	40.40	
	TOTAL INVESTMENT	24360.75	556.82	

APPENDIX 3

COW-CALF BUDGETS - VERMILION REGION

APPENDIX 3

Alberta
AGRICULTURE

LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT- VERMILION REGION
FOR: COW-CALF (21 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		790.40		
	SALE - CALVES, YEARLINGS, FIN.		64012.38	573.98	
	NET SALES OF COWS/BULLS		5358.81	48.05	
	INVENTORY ADJUSTMENT		5145.09	46.13	
	MISCELLANEOUS RECEIPTS		1040.95	9.33	
A.	VALUE OF PRODUCTION		75557.19	677.50	95.59
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		3237.48	29.03	
	MISCELLANEOUS TOOLS & EQUIP.		197.90	1.77	
	BUILDING REPAIRS		1331.10	11.94	
	FENCE AND WELL REPAIRS		741.38	6.65	
	OPERATING INTEREST PD.		2016.95	18.09	
	UTILITIES		686.81	6.16	
	ACCOUNTING AND LEGAL		434.48	3.90	
	HIRED LABOUR		702.29	6.30	
	LIVESTOCK PURCHASES(CALVES)		174.52	1.56	
	VET AND MEDICINE		1942.95	17.42	
	CUSTOM WORK HIRED		1940.19	17.40	
	TRANSPORTING AND MARKETING		917.05	8.22	
	BEDDING AND SUPPLIES		83.95	0.75	
	MISCELLANEOUS		1729.76	15.51	
	TAXES AND INSURANCE		599.05	5.37	
	HOMEGROWN FEED (CASH COST)		25362.82	227.42	
	PURCHASED FEED		9523.69	85.40	
	TOTAL CASH COSTS		51622.33	462.88	65.31
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		3708.38	33.25	
	CAPITAL INTEREST PAID		1626.29	14.58	
	HOMEGROWN FEED (NON-CASH)		20705.93	185.66	
	OPERATOR AND FAMILY LABOUR		12074.86	108.27	
	TOTAL CAPITAL COSTS		38115.46	341.77	48.22
	TOTAL PRODUCTION COSTS		89737.56	804.65	113.53
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		23934.82	214.62	30.28
	RETURN TO CAPITAL(CONT.MARGIN)		11859.96	106.34	15.00
	RETURN TO EQUITY	-11.57 %	-14180.62	-127.15	-17.94
	HERD SIZE		111.52		
	LABOUR USED (HOURS)		2010.76	18.03	2.54
	# OF HEAD SOLD (PROD'N STOCK)		96.95		
	# OF HEAD SOLD (BREEDING STK.)		19.57		
	AVERAGE WEANING WEIGHT		498.57		
	WEANING PERCENTAGE	92.06 %			
	AVERAGE SELLING WEIGHT		888.12		
	AVG. POUNDS WEANED PER COW		458.60		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		92830.37	832.38	
	LAND		6242.33	55.97	
	BUILDINGS AND IMPROVEMENTS		20755.23	186.11	
	MACHINERY		24284.81	217.75	
	TOTAL INVESTMENT		144112.75	1292.22	
	EQUITY (%)		85.03		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION
FOR: COW-CALF (21 FARMS)

F. HOMEGROWN FEED COSTS

	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)	2864.95	8082.53	4840.25	72.47
OATS (BUSHELS)	2576.90	10047.39	6666.90	90.09
BARLEY (BUSHELS)	369.05	2387.02	1407.50	21.40
OTHER GRAIN(BUSHELS)	235.62	8340.96	3576.44	74.79
TAME HAY (TONS)	25.35	589.72	271.53	5.29
NATIVE HAY (TONS)	58.12	3367.84	2125.00	30.20
DRY SILAGE (TONS)	44.00	4376.73	2701.89	39.24
GREENFEED (TONS)	145.40	3642.36	1342.75	32.66
STRAW (TONS)		2354.89	1003.95	21.12
NATIVE PASTURE		2750.53	1326.15	24.66
TAME PASTURE		128.78	100.50	1.15
TAME PASTURE				
OWNED PASTURE (TOTAL AUMS)	407.57			
TOTAL		46068.77	25382.82	413.08

PURCHASED FEED

GRAIN (BUSHELS)	874.33	2083.33		18.68
GRAIN (BUSHELS)		597.71		5.36
SUPPLEMENT (TONS)	10.61	2983.71		26.75
COMPLETE FEED (TONS)				
HAY (TONS)	40.19	1422.90		12.76
DRY SILAGE (TONS)				
GREENFEED(TONS)	3.33	190.48		1.71
STRAW - FEED (TONS)	7.90	120.00		1.08
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		123.05		1.10
NATIVE PASTURE		982.55		8.81
TAME PASTURE		1019.95		9.15
AFTERMATH PASTURE				
RENTED PASTURE (TOTAL AUMS)	170.57			
TOTAL		9523.69		85.40

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT- VERMILION REGION
FOR: COW-CALF - MORE THAN 100 COWS (10 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		1274.93		
	SALE - CALVES, YEARLINGS, FIN.		106592.37	648.77	
	NET SALES OF COWS/BULLS		5973.50	36.36	
	INVENTORY ADJUSTMENT		8213.20	49.99	
	MISCELLANEOUS RECEIPTS		2025.90	12.33	
A.	VALUE OF PRODUCTION		122805.00	747.44	96.32
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		4401.80	26.79	
	MISCELLANEOUS TOOLS & EQUIP.		245.80	1.50	
	BUILDING REPAIRS		2069.30	12.59	
	FENCE AND WELL REPAIRS		1155.10	7.03	
	OPERATING INTEREST PD.		4093.70	24.92	
	UTILITIES		908.30	5.53	
	ACCOUNTING AND LEGAL		649.90	3.96	
	HIRED LABOUR		1101.70	6.71	
	LIVESTOCK PURCHASES(CALVES)		46.50	0.28	
	VET AND MEDICINE		3178.10	19.34	
	CUSTOM WORK HIRED		2343.90	14.27	
	TRANSPORTING AND MARKETING		1368.30	8.33	
	BEDDING AND SUPPLIES				
	MISCELLANEOUS		3232.80	19.68	
	TAXES AND INSURANCE		803.40	4.89	
	HOMEGROWN FEED (CASH COST)		43328.00	263.71	
	PURCHASED FEED		15772.20	96.00	
	TOTAL CASH COSTS		84698.75	515.51	66.43
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		4927.90	29.99	
	CAPITAL INTEREST PAID		2941.40	17.90	
	HOMEGROWN FEED (NON-CASH)		32377.77	197.06	
	OPERATOR AND FAMILY LABOUR		17734.70	107.94	
	TOTAL CAPITAL COSTS		57981.77	352.90	45.48
	TOTAL PRODUCTION COSTS		142680.50	868.41	111.91
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		38106.17	231.93	29.89
	RETURN TO CAPITAL(CONT.MARGIN)		20371.48	123.99	15.98
	RETURN TO EQUITY	-11.92 %	-19875.59	-120.97	-15.59
	HERD SIZE		164.30		
	LABOUR USED (HOURS)		2977.10	18.12	2.34
	# OF HEAD SOLD (PROD'N STOCK)		156.80		
	# OF HEAD SOLD (BREEDING STK.)		24.00		
	AVERAGE WEANING WEIGHT		491.78		
	WEANING PERCENTAGE	93.12 %			
	AVERAGE SELLING WEIGHT		936.56		
	AVG. POUNDS WEANED PER COW		457.30		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		137861.00	839.08	
	LAND		6775.50	41.24	
	BUILDINGS AND IMPROVEMENTS		28727.90	174.85	
	MACHINERY		31713.60	193.02	
	TOTAL INVESTMENT		205078.00	1248.19	
	EQUITY (%)		81.32		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION
FOR: COW-CALF -. MORE THAN 100 COWS
(10 FARMS)

F. HOMEGROWN FEED COSTS	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	4218.80	14008.55	8132.42	85.26
BARLEY (BUSHELS)	5076.50	20394.76	13530.84	124.13
OTHER GRAIN(BUSHELS)	775.00	5012.75	2955.75	30.51
TAME HAY (TONS)	337.30	10461.05	4868.25	63.67
NATIVE HAY (TONS)	39.50	947.88	481.86	5.77
DRY SILAGE (TONS)	99.25	5688.95	3342.30	34.63
GREENFEED (TONS)	71.20	7807.62	5118.49	47.52
STRAW (TONS)	210.35	4416.28	1879.01	26.88
NATIVE PASTURE		3525.26	1599.89	21.46
TAME PASTURE		3196.12	1220.95	19.45
TAME PASTURE		246.56	198.26	1.50
OWNED PASTURE (TOTAL AUMS)	634.90			
TOTAL		75705.75	43328.00	460.78
PURCHASED FEED				
GRAIN (BUSHELS)	1716.10	4195.00		25.53
GRAIN (BUSHELS)		1255.20		7.64
SUPPLEMENT (TONS)	14.50	4722.50		28.74
COMPLETE FEED (TONS)				
HAY (TONS)	67.70	2317.60		14.11
DRY SILAGE (TONS)				
GREENFEED(TONS)				
STRAW - FEED (TONS)	16.60	252.00		1.53
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		30.30		0.18
NATIVE PASTURE		1258.50		7.66
TAME PASTURE		1741.10		10.60
AFTERMATH PASTURE				
RENTED PASTURE (TOTAL AUMS)	233.80			
TOTAL		15772.20		96.00

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT- VERMILION REGION
FOR:COW-CALF - 100 COWS AND LESS
(11 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		349.93		
	SALE - CALVES, YEARLINGS, FIN.		25303.27	398.19	
	NET SALES OF COWS/BULLS		4800.00	75.54	
	INVENTORY ADJUSTMENT		2355.91	37.07	
	MISCELLANEOUS RECEIPTS		145.55	2.29	
A.	VALUE OF PRODUCTION		32604.73	513.09	93.18
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		2179.00	34.29	
	MISCELLANEOUS TOOLS & EQUIP.		154.36	2.43	
	BUILDING REPAIRS		660.00	10.39	
	FENCE AND WELL REPAIRS		365.27	5.75	
	OPERATING INTEREST PD.		129.00	2.03	
	UTILITIES		485.45	7.64	
	ACCOUNTING AND LEGAL		238.64	3.76	
	HIRED LABOUR		339.18	5.34	
	LIVESTOCK PURCHASES(CALVES)		290.91	4.58	
	VET AND MEDICINE		820.09	12.91	
	CUSTOM WORK HIRED		1573.18	24.76	
	TRANSPORTING AND MARKETING		506.82	7.98	
	BEDDING AND SUPPLIES		160.27	2.52	
	MISCELLANEOUS		363.36	5.72	
	TAXES AND INSURANCE		413.27	6.50	
	HOMEGROWN FEED (CASH COST)		9030.86	142.12	
	PURCHASED FEED		3843.23	60.48	
	TOTAL CASH COSTS		21552.89	339.17	61.59
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		2599.73	40.91	
	CAPITAL INTEREST PAID		430.73	6.78	
	HOMEGROWN FEED (NON-CASH)		10095.19	158.87	
	OPERATOR AND FAMILY LABOUR		6929.54	109.05	
	TOTAL CAPITAL COSTS		20055.18	315.60	57.31
	TOTAL PRODUCTION COSTS		41608.11	654.78	118.91
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		11051.78	173.92	31.58
	RETURN TO CAPITAL(CONT.MARGIN)		4122.25	64.87	11.78
	RETURN TO EQUITY	-10.94 %	-9003.39	-141.68	-25.73
	HERD SIZE		63.55		
	LABOUR USED (HOURS)		1132.27	17.82	3.24
	# OF HEAD SOLD (PROD'N STOCK)		42.55		
	# OF HEAD SOLD (BREEDING STK.)		15.55		
	AVERAGE WEANING WEIGHT		514.52		
	WEANING PERCENTAGE	89.56 %			
	AVERAGE SELLING WEIGHT		725.84		
	AVG. POUNDS WEANED PER COW		461.65		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		51893.45	816.64	
	LAND		5757.63	90.61	
	BUILDINGS AND IMPROVEMENTS		13507.36	212.56	
	MACHINERY		17531.36	275.89	
	TOTAL INVESTMENT		88689.81	1395.69	
	EQUITY (%)		92.82		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION
FOR: COW-CALF - 100 COWS AND LESS
(11 FARMS)

F. HOMEGROWN FEED COSTS	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	1634.18	2695.26	1847.37	42.41
BARLEY (BUSHELS)	304.55	640.68	426.95	10.08
OTHER GRAIN(BUSHELS)				
TAME HAY (TONS)	143.18	6413.62	2402.07	100.93
NATIVE HAY (TONS)	12.55	264.12	80.33	4.16
DRY SILAGE (TONS)	20.73	1257.75	1018.36	19.79
GREENFEED (TONS)	19.27	1257.75	504.99	19.79
STRAW (TONS)	86.36	2938.81	855.24	46.25
NATIVE PASTURE		1290.92	462.18	20.31
TAME PASTURE		2345.45	1421.78	36.91
TAME PASTURE		21.71	11.62	0.34
OWNED PASTURE (TOTAL AUMS)	200.91			
TOTAL		19126.07	9030.86	300.98
PURCHASED FEED				
GRAIN (BUSHELS)	109.09	163.64		2.58
GRAIN (BUSHELS)				
SUPPLEMENT (TONS)	7.07	1403.00		22.08
COMPLETE FEED (TONS)				
HAY (TONS)	15.19	609.55		9.59
DRY SILAGE (TONS)				
GREENFEED(TONS)	6.36	363.64		5.72
STRAW - FEED (TONS)				
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		207.36		3.26
NATIVE PASTURE		731.69		11.51
TAME PASTURE		364.36		5.73
AFTERMATH PASTURE				
RENTED PASTURE (TOTAL AUMS)	113.09			
TOTAL		3843.23		60.48

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT- VERMILION REGION
FOR: COW-CALF - SELLING WEIGHT OF CALVES LESS THAN 750 POUNDS
(10 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		485.07		
	SALE - CALVES, YEARLINGS, FIN.		40279.40	425.79	
	NET SALES OF COWS/BULLS		-924.70	-9.77	
	INVENTORY ADJUSTMENT		3621.10	38.28	
	MISCELLANEOUS RECEIPTS		960.50	10.15	
A.	VALUE OF PRODUCTION		43936.30	464.44	90.58
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		2578.50	27.26	
	MISCELLANEOUS TOOLS & EQUIP.		151.00	1.60	
	BUILDING REPAIRS		1220.70	12.90	
	FENCE AND WELL REPAIRS		630.30	6.66	
	OPERATING INTEREST PD.		722.70	7.64	
	UTILITIES		799.70	8.45	
	ACCOUNTING AND LEGAL		348.60	3.68	
	HIRED LABOUR		494.60	5.23	
	LIVESTOCK PURCHASES(CALVES)		320.00	3.38	
	VET AND MEDICINE		1116.10	11.80	
	CUSTOM WORK HIRED		333.30	3.52	
	TRANSPORTING AND MARKETING		969.20	10.25	
	BEDDING AND SUPPLIES		176.30	1.86	
	MISCELLANEOUS		1166.60	12.33	
	TAXES AND INSURANCE		556.20	5.88	
	HOMEGROWN FEED (CASH COST)		16790.55	177.49	
	PURCHASED FEED		5957.66	62.98	
	TOTAL CASH COSTS		34332.01	362.92	70.78
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		3589.90	37.95	
	CAPITAL INTEREST PAID		473.80	5.01	
	HOMEGROWN FEED (NON-CASH)		15816.20	167.19	
	OPERATOR AND FAMILY LABOUR		10386.80	109.80	
	TOTAL CAPITAL COSTS		30266.70	319.94	62.40
	TOTAL PRODUCTION COSTS		64598.74	682.86	133.17
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		9604.24	101.52	19.80
	RETURN TO CAPITAL(CONT.MARGIN)		-782.54	-8.27	-1.61
	RETURN TO EQUITY	-17.71 %	-20662.44	-218.42	-42.60
	HERD SIZE		94.60		
	LABOUR USED (HOURS)		1745.30	18.45	3.60
	# OF HEAD SOLD (PROD'N STOCK)		74.10		
	# OF HEAD SOLD (BREEDING STK.)		17.70		
	AVERAGE WEANING WEIGHT		503.86		
	WEANING PERCENTAGE	93.23 %			
	AVERAGE SELLING WEIGHT		659.09		
	AVG. POUNDS WEANED PER COW		467.58		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		76966.25	813.60	
	LAND		6390.90	67.56	
	BUILDINGS AND IMPROVEMENTS		21808.00	230.53	
	MACHINERY		22783.90	240.84	
	TOTAL INVESTMENT		127949.06	1352.53	
	EQUITY (%)		91.16		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION
FOR: COW-CALF - SELLING WEIGHT OF CALVES
LESS THAN 750 POUNDS
(10 FARMS)

F. HOMEGROWN FEED COSTS	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	2738.80	5968.67	3399.42	63.09
BARLEY (BUSHELS)	1430.40	7371.06	4666.54	77.92
OTHER GRAIN(BUSHELS)				
TAME HAY (TONS)	196.10	8005.75	2924.65	84.63
NATIVE HAY (TONS)	27.50	680.70	283.30	7.20
DRY SILAGE (TONS)	24.00	1617.03	1357.20	17.09
GREENFEED (TONS)	5.00	366.60	213.80	3.88
STRAW (TONS)	131.70	3367.43	1204.97	35.60
NATIVE PASTURE		2476.60	1034.89	26.18
TAME PASTURE		2482.51	1494.80	26.24
TAME PASTURE		270.44	211.04	2.86
OWNED PASTURE (TOTAL AUMS)	285.60			
TOTAL		32606.80	16790.55	344.68
PURCHASED FEED				
GRAIN (BUSHELS)	466.10	1080.00		11.42
GRAIN (BUSHELS)				
SUPPLEMENT (TONS)	6.97	1754.50		18.55
COMPLETE FEED (TONS)				
HAY (TONS)	35.86	1044.10		11.04
DRY SILAGE (TONS)				
GREENFEED(TONS)				
STRAW - FEED (TONS)	14.00	200.00		2.11
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		249.90		2.64
NATIVE PASTURE		1082.06		11.44
TAME PASTURE		547.10		5.78
AFTERMATH PASTURE				
RENTED PASTURE (TOTAL AUMS)	130.70			
TOTAL		5957.66		62.98

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT- VERMILION REGION
FOR: COW-CALF - SELLING WEIGHT OF CALVES 750 POUNDS AND OVER (11 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		1067.98		
	SALE - CALVES, YEARLINGS, FIN.		85587.81	674.40	
	NET SALES OF COWS/BULLS		11071.09	87.24	
	INVENTORY ADJUSTMENT		6530.54	51.46	
	MISCELLANEOUS RECEIPTS		1114.09	8.78	
A.	VALUE OF PRODUCTION		104303.50	821.88	97.66
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		3836.55	30.23	
	MISCELLANEOUS TOOLS & EQUIP.		240.55	1.90	
	BUILDING REPAIRS		1431.45	11.28	
	FENCE AND WELL REPAIRS		842.36	6.64	
	OPERATING INTEREST PD.		3193.55	25.16	
	UTILITIES		584.18	4.60	
	ACCOUNTING AND LEGAL		512.55	4.04	
	HIRED LABOUR		891.09	7.02	
	LIVESTOCK PURCHASES(CALVES)		42.27	0.33	
	VET AND MEDICINE		2694.64	21.23	
	CUSTOM WORK HIRED		3401.00	26.80	
	TRANSPORTING AND MARKETING		869.64	6.85	
	BEDDING AND SUPPLIES				
	MISCELLANEOUS		2241.73	17.66	
	TAXES AND INSURANCE		638.00	5.03	
	HOMEGROWN FEED (CASH COST)		33155.79	261.26	
	PURCHASED FEED		12765.54	100.59	
	TOTAL CASH COSTS		67340.87	530.62	63.05
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		3816.09	30.07	
	CAPITAL INTEREST PAID		2674.00	21.07	
	HOMEGROWN FEED (NON-CASH)		25151.14	198.18	
	OPERATOR AND FAMILY LABOUR		13609.45	107.24	
	TOTAL CAPITAL COSTS		45250.69	356.56	42.37
	TOTAL PRODUCTION COSTS		112591.50	887.18	105.43
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		36962.62	291.25	34.61
	RETURN TO CAPITAL(CONT.MARGIN)		23353.17	184.01	21.87
	RETURN TO EQUITY	-6.48 %	-8288.06	-65.31	-7.76
	HERD SIZE		126.91		
	LABOUR USED (HOURS)		2252.09	17.75	2.11
	# OF HEAD SOLD (PROD'N STOCK)		117.73		
	# OF HEAD SOLD (BREEDING STK.)		21.27		
	AVERAGE WEANING WEIGHT		494.98		
	WEANING PERCENTAGE	91.26 %			
	AVERAGE SELLING WEIGHT		1019.17		
	AVG. POUNDS WEANED PER COW		452.51		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		107252.25	845.11	
	LAND		6107.27	48.12	
	BUILDINGS AND IMPROVEMENTS		19798.18	156.00	
	MACHINERY		25649.27	202.11	
	TOTAL INVESTMENT		158807.00	1251.34	
	EQUITY (%)		80.54		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-VERMILION REGION
FOR: COW-CALF - SELLING WEIGHT OF CALVES
750 POUNDS AND OVER
(11 FARMS)

F. HOMEGROWN FEED COSTS

	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	2979.64	10004.24	6150.09	78.83
BARLEY (BUSHELS)	3619.18	12480.43	8485.43	98.34
OTHER GRAIN(BUSHELS)	704.55	4557.04	2687.04	35.91
TAME HAY (TONS)	271.55	8645.71	4168.98	68.13
NATIVE HAY (TONS)	23.45	507.01	260.84	4.00
DRY SILAGE (TONS)	89.14	4959.49	2822.99	39.08
GREENFEED (TONS)	79.45	8022.32	4963.80	63.21
STRAW (TONS)	157.86	3892.30	1468.00	30.67
NATIVE PASTURE		2244.25	975.81	17.68
TAME PASTURE		2994.18	1172.83	23.59
TAME PASTURE				
OWNED PASTURE (TOTAL AUMS)	518.45			
TOTAL		58306.94	33155.79	459.44
PURCHASED FEED				
GRAIN (BUSHELS)	1245.45	2995.45		23.60
GRAIN (BUSHELS)		1141.09		8.99
SUPPLEMENT (TONS)	13.91	4101.18		32.32
COMPLETE FEED (TONS)				
HAY (TONS)	44.13	1767.27		13.93
DRY SILAGE (TONS)				
GREENFEED(TONS)	6.36	363.64		2.87
STRAW - FEED (TONS)	2.36	47.27		0.37
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		7.73		0.06
NATIVE PASTURE		892.09		7.03
TAME PASTURE		1449.82		11.42
AFTERMATH PASTURE				
RENTED PASTURE (TOTAL AUMS)	206.82			
TOTAL		12765.54		100.59

APPENDIX 4

COW-CALF BUDGETS - VERMILION REGION

Alberta AGRICULTURE

LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF (15 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		701.24		
	SALE - CALVES, YEARLINGS, FIN.		36826.78	350.61	
	NET SALES OF COWS/BULLS		76.17	0.73	
	INVENTORY ADJUSTMENT		15355.27	146.99	
	MISCELLANEOUS RECEIPTS		397.33	3.80	
A.	VALUE OF PRODUCTION		52455.55	502.13	74.80
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		3686.13	35.29	
	MISCELLANEOUS TOOLS & EQUIP.		238.27	2.28	
	BUILDING REPAIRS		611.73	5.86	
	FENCE AND WELL REPAIRS		808.60	7.74	
	OPERATING INTEREST PD.		1241.87	11.89	
	UTILITIES		705.07	6.75	
	ACCOUNTING AND LEGAL		220.07	2.11	
	HIRED LABOUR		865.73	8.29	
	LIVESTOCK PURCHASES(CALVES)		69.20	0.66	
	VET AND MEDICINE		1499.80	14.36	
	CUSTOM WORK HIRED		343.67	3.29	
	TRANSPORTING AND MARKETING		360.05	3.45	
	BEDDING AND SUPPLIES				
	MISCELLANEOUS		398.93	3.82	
	TAXES AND INSURANCE		403.00	3.86	
	HOMEGROWN FEED (CASH COST)		17002.78	162.76	
	PURCHASED FEED		4689.27	44.89	
	TOTAL CASH COSTS		33144.16	317.27	47.27
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		3811.53	36.49	
	CAPITAL INTEREST PAID		1452.80	13.91	
	HOMEGROWN FEED (NON-CASH)		15447.67	147.87	
	OPERATOR AND FAMILY LABOUR		7798.20	74.65	
	TOTAL CAPITAL COSTS		28510.20	272.91	40.66
	TOTAL PRODUCTION COSTS		61654.39	590.18	87.92
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		19311.35	184.86	27.54
	RETURN TO CAPITAL(CONT.MARGIN)		11513.15	110.21	16.42
	RETURN TO EQUITY	-7.92 %	-9198.83	-88.06	-13.12
	HERD SIZE		104.47		
	LABOUR USED (HOURS)		1376.33	13.17	1.96
	# OF HEAD SOLD (PROD'N STOCK)		64.47		
	# OF HEAD SOLD (BREEDING STK.)		17.47		
	AVERAGE WEANING WEIGHT		558.70		
	WEANING PERCENTAGE	92.15 %			
	AVERAGE SELLING WEIGHT		787.45		
	AVG. POUNDS WEANED PER COW		515.37		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		91099.19	872.04	
	LAND				
	BUILDINGS AND IMPROVEMENTS		20841.40	199.50	
	MACHINERY		24115.27	230.84	
	TOTAL INVESTMENT		136055.81	1302.39	
	EQUITY (%)		85.32		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF (15 FARMS)

F. HOMEGROWN FEED COSTS	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	2788.27	4304.70	2175.13	41.21
BARLEY (BUSHELS)	845.13	1842.86	1031.70	17.64
OTHER GRAIN(BUSHELS)	282.93	492.69	278.01	4.72
TAME HAY (TONS)	416.33	16089.57	9145.45	154.02
NATIVE HAY (TONS)				
DRY SILAGE (TONS)	46.20	2023.33	761.47	19.37
GREENFEED (TONS)	7.93	603.56	257.38	5.78
STRAW (TONS)	103.00	1642.39	806.73	15.72
NATIVE PASTURE		652.35	155.91	6.24
TAME PASTURE		4799.02	2391.03	45.94
TAME PASTURE				
OWNED PASTURE (TOTAL AUMS)	359.40			
TOTAL		32450.47	17002.78	310.63
PURCHASED FEED				
GRAIN (BUSHELS)	33.33	50.00		0.48
GRAIN (BUSHELS)				
SUPPLEMENT (TONS)				
COMPLETE FEED (TONS)				
HAY (TONS)	28.93	1163.27		11.14
DRY SILAGE (TONS)				
GREENFEED(TONS)				
STRAW - FEED (TONS)				
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		1389.87		13.30
NATIVE PASTURE		210.00		2.01
TAME PASTURE		1816.07		17.38
AFTERMATH PASTURE		60.07		0.57
RENTED PASTURE (TOTAL AUMS)	183.53			
TOTAL		4689.27		44.89

Alberta AGRICULTURE

LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF - MORE THAN 100 COWS
(8 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		901.16		
	SALE - CALVES, YEARLINGS, FIN.		46476.62	338.94	
	NET SALES OF COWS/BULLS		-1265.75	-9.23	
	INVENTORY ADJUSTMENT		20150.75	146.95	
	MISCELLANEOUS RECEIPTS		525.00	3.83	
A.	VALUE OF PRODUCTION		65886.62	480.49	73.11
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		4599.12	33.54	
	MISCELLANEOUS TOOLS & EQUIP.		323.12	2.36	
	BUILDING REPAIRS		882.62	6.44	
	FENCE AND WELL REPAIRS		845.12	6.16	
	OPERATING INTEREST PD.		1577.12	11.50	
	UTILITIES		921.75	6.72	
	ACCOUNTING AND LEGAL		225.25	1.64	
	HIRED LABOUR		1577.62	11.51	
	LIVESTOCK PURCHASES(CALVES)		62.50	0.46	
	VET AND MEDICINE		2022.25	14.75	
	CUSTOM WORK HIRED		434.37	3.17	
	TRANSPORTING AND MARKETING		407.75	2.97	
	BEDDING AND SUPPLIES				
	MISCELLANEOUS		556.37	4.06	
	TAXES AND INSURANCE		486.62	3.56	
	HOMEGROWN FEED (CASH COST)		20153.60	146.97	
	PURCHASED FEED		5532.75	40.36	
	TOTAL CASH COSTS		40610.96	296.16	45.07
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		4752.50	34.66	
	CAPITAL INTEREST PAID		1125.50	8.21	
	HOMEGROWN FEED (NON-CASH)		17487.23	127.53	
	OPERATOR AND FAMILY LABOUR		8509.25	62.05	
	TOTAL CAPITAL COSTS		31874.47	232.45	35.37
	TOTAL PRODUCTION COSTS		72485.44	528.61	80.44
D	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		25275.62	184.33	28.05
	RETURN TO CAPITAL(CONT.MARGIN)		16766.37	122.27	18.61
	RETURN TO EQUITY	-4.18 %	-6598.84	-48.12	-7.32
	HERD SIZE		137.12		
	LABOUR USED (HOURS)		1640.25	11.96	1.82
	# OF HEAD SOLD (PROD'N STOCK)		84.88		
	# OF HEAD SOLD (BREEDING STK.)		20.25		
	AVERAGE WEANING WEIGHT		557.81		
	WEANING PERCENTAGE	91.70 %			
	AVERAGE SELLING WEIGHT		790.05		
	AVG. POUNDS WEANED PER COW		511.76		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		119646.00	872.53	
	LAND				
	BUILDINGS AND IMPROVEMENTS		25415.12	185.34	
	MACHINERY		30398.87	221.69	
	TOTAL INVESTMENT		175460.00	1279.56	
	EQUITY (%)		90.01		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF - MORE THAN 100 COWS

F. HOMEGROWN FEED COSTS	QUANTITY	(8 FARMS) TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	3518.00	5545.45	2826.39	40.44
BARLEY (BUSHELS)	834.62	1695.37	901.93	12.36
OTHER GRAIN(BUSHELS)	530.50	923.80	521.26	6.74
TAME HAY (TONS)	555.12	17712.06	10445.73	129.17
NATIVE HAY (TONS)				
DRY SILAGE (TONS)	74.13	3017.63	1206.75	22.01
GREENFEED (TONS)				
STRAW (TONS)	161.25	2202.38	1104.27	16.06
NATIVE PASTURE		1223.15	292.32	8.92
TAME PASTURE		5321.01	2854.94	38.80
TAME PASTURE				
OWNED PASTURE (TOTAL AUMS)	480.62			
TOTAL		37640.84	20153.60	274.50
PURCHASED FEED				
GRAIN (BUSHELS)	62.50	93.75		0.68
GRAIN (BUSHELS)				
SUPPLEMENT (TONS)				
COMPLETE FEED (TONS)				
HAY (TONS)	48.63	1846.50		13.47
DRY SILAGE (TONS)				
GREENFEED(TONS)				
STRAW - FEED (TONS)				
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		2120.12		15.46
NATIVE PASTURE		393.75		2.87
TAME PASTURE		1079.62		7.87
AFTERMATH PASTURE				
RENTED PASTURE (TOTAL AUMS)	219.25			
TOTAL		5533.75		40.36

Alberta AGRICULTURE

LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF - 100 COWS AND LESS
(7 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		472.75		
	SALE - CALVES, YEARLINGS, FIN.		25369.82	377.85	
	NET SALES OF COWS/BULLS		1609.80	23.98	
	INVENTORY ADJUSTMENT		9874.71	147.07	
	MISCELLANEOUS RECEIPTS		251.43	3.74	
A.	VALUE OF PRODUCTION		37105.77	552.64	78.49
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		2642.71	39.36	
	MISCELLANEOUS TOOLS & EQUIP.		141.29	2.10	
	BUILDING REPAIRS		302.14	4.50	
	FENCE AND WELL REPAIRS		766.86	11.42	
	OPERATING INTEREST PD.		858.71	12.79	
	UTILITIES		457.43	6.81	
	ACCOUNTING AND LEGAL		214.14	3.19	
	HIRED LABOUR		52.14	0.78	
	LIVESTOCK PURCHASES(CALVES)		76.86	1.14	
	VET AND MEDICINE		902.71	13.44	
	CUSTOM WORK HIRED		240.00	3.57	
	TRANSPORTING AND MARKETING		305.54	4.55	
	BEDDING AND SUPPLIES				
	MISCELLANEOUS		219.00	3.26	
	TAXES AND INSURANCE		305.14	4.54	
	HOMEGROWN FEED (CASH COST)		13401.87	199.60	
	PURCHASED FEED		3724.14	55.47	
	TOTAL CASH COSTS		24610.68	366.54	52.06
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		2736.14	40.75	
	CAPITAL INTEREST PAID		1826.86	27.21	
	HOMEGROWN FEED (NON-CASH)		13116.77	195.36	
	OPERATOR AND FAMILY LABOUR		6985.57	104.04	
	TOTAL CAPITAL COSTS		24665.33	367.36	52.17
	TOTAL PRODUCTION COSTS		49276.02	733.90	104.23
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		12495.05	186.10	26.43
	RETURN TO CAPITAL(CONT.MARGIN)		5509.50	82.06	11.65
	RETURN TO EQUITY	-17.83 %	-12170.27	-181.26	-25.74
	HERD SIZE		67.14		
	LABOUR USED (HOURS)		1074.71	16.01	2.27
	# OF HEAD SOLD (PROD'N STOCK)		41.14		
	# OF HEAD SOLD (BREEDING STK.)		14.29		
	AVERAGE WEANING WEIGHT		580.79		
	WEANING PERCENTAGE	93.19 %			
	AVERAGE SELLING WEIGHT		781.33		
	AVG. POUNDS WEANED PER COW		523.80		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		58474.29	870.89	
	LAND				
	BUILDINGS AND IMPROVEMENTS		15614.29	232.55	
	MACHINERY		16934.00	252.21	
	TOTAL INVESTMENT		91022.56	1355.66	
	EQUITY (%)		74.97		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF - 100 COWS AND LESS
(7 FARMS)

F. HOMEGROWN FEED COSTS	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	1954.29	2886.71	1430.83	42.89
BARLEY (BUSHELS)	857.14	2011.43	1180.00	29.96
OTHER GRAIN(BUSHELS)				
TAME HAY (TONS)	257.71	14235.30	7659.43	212.02
NATIVE HAY (TONS)				
DRY SILAGE (TONS)	14.29	887.00	252.57	13.21
GREENFEED (TONS)	17.00	1293.34	551.54	19.26
STRAW (TONS)	36.43	1002.40	466.68	14.93
NATIVE PASTURE				
TAME PASTURE		4202.47	1860.84	62.59
TAME PASTURE				
OWNED PASTURE (TOTAL AUMS)	220.86			
TOTAL		26518.64	13401.87	394.96
PURCHASED FEED				
GRAIN (BUSHELS)				
GRAIN (BUSHELS)				
SUPPLEMENT (TONS)				
COMPLETE FEED (TONS)				
HAY (TONS)	6.43	382.43		5.70
DRY SILAGE (TONS)				
GREENFEED(TONS)				
STRAW - FEED (TONS)				
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		555.29		8.27
NATIVE PASTURE				
TAME PASTURE		2657.71		39.58
AFTERMATH PASTURE		128.71		1.92
RENTED PASTURE (TOTAL AUMS)	142.71			
TOTAL		3724.14		55.47

Alberta AGRICULTURE

LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF - SELLING WEIGHT OF CALVES LESS THAN 750 POUNDS (8 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		673.49		
	SALE - CALVES, YEARLINGS, FIN.		26465.84	239.78	
	NET SALES OF COWS/BULLS		3322.33	30.10	
	INVENTORY ADJUSTMENT		15529.12	140.69	
	MISCELLANEOUS RECEIPTS		745.00	6.75	
A.	VALUE OF PRODUCTION		46062.30	417.33	68.39
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		3670.75	33.26	
	MISCELLANEOUS TOOLS & EQUIP.		184.50	1.67	
	BUILDING REPAIRS		311.25	2.82	
	FENCE AND WELL REPAIRS		816.87	7.40	
	OPERATING INTEREST PD.		1393.50	12.63	
	UTILITIES		651.12	5.90	
	ACCOUNTING AND LEGAL		254.25	2.30	
	HIRED LABOUR		1451.37	13.15	
	LIVESTOCK PURCHASES(CALVES)		67.25	0.61	
	VET AND MEDICINE		1828.12	16.56	
	CUSTOM WORK HIRED		541.67	4.91	
	TRANSPORTING AND MARKETING		411.72	3.73	
	BEDDING AND SUPPLIES				
	MISCELLANEOUS				
	TAXES AND INSURANCE		288.62	2.61	
	HOMEGROWN FEED (CASH COST)		18042.81	163.47	
	PURCHASED FEED		4962.12	44.96	
	TOTAL CASH COSTS		34876.15	315.98	51.78
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		3259.00	29.53	
	CAPITAL INTEREST PAID		2649.37	24.00	
	HOMEGROWN FEED (NON-CASH)		18358.84	166.33	
	OPERATOR AND FAMILY LABOUR		7317.37	66.30	
	TOTAL CAPITAL COSTS		31584.58	286.16	46.90
	TOTAL PRODUCTION COSTS		66460.75	602.14	98.68
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		11186.11	101.35	16.61
	RETURN TO CAPITAL(CONT.MARGIN)		3868.75	35.05	5.74
	RETURN TO EQUITY	-19.70 %	-20398.45	-184.81	-30.29
	HERD SIZE		110.38		
	LABOUR USED (HOURS)		1450.62	13.14	2.15
	# OF HEAD SOLD (PROD'N STOCK)		55.13		
	# OF HEAD SOLD (BREEDING STK.)		21.38		
	AVERAGE WEANING WEIGHT		554.53		
	WEANING PERCENTAGE	89.47 %			
	AVERAGE SELLING WEIGHT		669.03		
	AVG. POUNDS WEANED PER COW		497.09		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		88902.87	805.46	
	LAND				
	BUILDINGS AND IMPROVEMENTS		15038.75	136.25	
	MACHINERY		22424.75	203.17	
	TOTAL INVESTMENT		126366.37	1144.88	
	EQUITY (%)		81.92		

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF - SELLING WEIGHT OF CALVES LESS THAN 750 POUNDS
(8 FARMS)

F. HOMEGROWN FEED COSTS

	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	2047.50	4098.62	2256.97	37.13
BARLEY (BUSHELS)	625.00	1273.75	675.00	11.54
OTHER GRAIN(BUSHELS)	375.00	675.00	393.75	6.12
TAME HAY (TONS)	337.50	16971.70	9165.12	153.76
NATIVE HAY (TONS)				
DRY SILAGE (TONS)	74.13	3017.63	1206.75	27.34
GREENFEED (TONS)	14.88	1131.67	482.59	10.25
STRAW (TONS)	96.00	1855.53	812.49	16.81
NATIVE PASTURE		818.40	83.33	7.41
TAME PASTURE		6559.36	2966.80	59.43
TAME PASTURE				
OWNED PASTURE (TOTAL AUMS)	411.87			
TOTAL		36401.66	18042.81	329.80
PURCHASED FEED				
GRAIN (BUSHELS)				
GRAIN (BUSHELS)				
SUPPLEMENT (TONS)				
COMPLETE FEED (TONS)				
HAY (TONS)	54.25	2181.12		19.76
DRY SILAGE (TONS)				
GREENFEED(TONS)				
STRAW - FEED (TONS)				
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		1259.87		11.41
NATIVE PASTURE		362.50		3.28
TAME PASTURE		1158.62		10.50
AFTERMATH PASTURE				
RENTED PASTURE (TOTAL AUMS)	177.25			
TOTAL		4962.12		44.96

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LIVESTOCK ENTERPRISE ANALYSIS
ALBERTA FARM ENTERPRISE RESEARCH PROJECT-BARRHEAD REGION
FOR: COW-CALF - SELLING WEIGHT OF CALVES 750 POUNDS AND OVER (7 FARMS)

			TOTAL	PER COW	PER CWT. PRODUCED
	TOTAL CWT. PRODUCED		732.94		
	SALE - CALVES, YEARLINGS, FIN.		48239.29	493.68	
	NET SALES OF COWS/BULLS		-3633.71	-37.19	
	INVENTORY ADJUSTMENT		15156.57	155.11	
	MISCELLANEOUS RECEIPTS				
A.	VALUE OF PRODUCTION		59762.14	611.60	81.54
B.	CASH COSTS				
	EQUIPMENT - FUEL AND REPAIRS		3703.71	37.90	
	MISCELLANEOUS TOOLS & EQUIP.		299.71	3.07	
	BUILDING REPAIRS		955.14	9.77	
	FENCE AND WELL REPAIRS		799.14	8.18	
	OPERATING INTEREST PD.		1068.57	10.94	
	UTILITIES		766.71	7.85	
	ACCOUNTING AND LEGAL		181.00	1.85	
	HIRED LABOUR		196.43	2.01	
	LIVESTOCK PURCHASES(CALVES)		71.43	0.73	
	VET AND MEDICINE		1124.57	11.51	
	CUSTOM WORK HIRED		117.14	1.20	
	TRANSPORTING AND MARKETING		301.00	3.08	
	BEDDING AND SUPPLIES				
	MISCELLANEOUS		854.86	8.75	
	TAXES AND INSURANCE		533.71	5.46	
	HOMEGROWN FEED (CASH COST)		15814.19	161.84	
	PURCHASED FEED		4377.43	44.80	
	TOTAL CASH COSTS		31164.75	318.94	42.52
C.	CAPITAL COSTS & UNPAID LABOUR				
	DEPRECIATION - BLDGS.& EQUIP.		4443.00	45.47	
	CAPITAL INTEREST PAID		85.29	0.87	
	HOMEGROWN FEED (NON-CASH)		12120.85	124.04	
	OPERATOR AND FAMILY LABOUR		8347.71	85.43	
	TOTAL CAPITAL COSTS		24996.83	255.81	34.10
	TOTAL PRODUCTION COSTS		56161.41	574.75	76.62
D.	MANAGEMENT INDICATORS				
	RETURN OVER CASH COSTS		28597.35	292.66	39.02
	RETURN TO CAPITAL(CONT.MARGIN)		20249.64	207.23	27.63
	RETURN TO EQUITY	2.76 %	3600.72	36.85	4.91
	HERD SIZE		97.71		
	LABOUR USED (HOURS)		1291.43	13.22	1.76
	# OF HEAD SOLD (PROD'N STOCK)		75.14		
	# OF HEAD SOLD (BREEDING STK.)		13.00		
	AVERAGE WEANING WEIGHT		564.09		
	WEANING PERCENTAGE	95.61 %			
	AVERAGE SELLING WEIGHT		886.74		
	AVG. POUNDS WEANED PER COW		538.97		
E.	INVESTMENT ITEMS				
	LIVESTOCK (BREEDING STOCK)		93609.25	957.99	
	LAND				
	BUILDINGS AND IMPROVEMENTS		27473.00	281.16	
	MACHINERY		26047.29	266.57	
	TOTAL INVESTMENT		147129.56	1505.71	
	EQUITY (%)		88.85		

Alberta
AGRICULTURE

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F. HOMEGROWN FEED COSTS

	QUANTITY	TOTAL	CASH COST	PER COW
WHEAT (BUSHELS)				
OATS (BUSHELS)	3634.86	4540.23	2081.59	46.46
BARLEY (BUSHELS)	1096.71	2493.27	1439.35	25.52
OTHER GRAIN(BUSHELS)	177.71	284.34	145.73	2.91
TAME HAY (TONS)	506.43	15081.43	9122.98	154.34
NATIVE HAY (TONS)				
DRY SILAGE (TONS)	14.29	887.00	252.57	9.08
GREENFEED (TONS)				
STRAW (TONS)	111.00	1398.80	800.14	14.32
NATIVE PASTURE		462.57	238.86	4.73
TAME PASTURE		2787.21	1733.00	28.52
TAME PASTURE				
OWNED PASTURE (TOTAL AUMS)	299.43			
TOTAL		27934.84	15814.19	285.88
PURCHASED FEED				
GRAIN (BUSHELS)	71.43	107.14		1.10
GRAIN (BUSHELS)				
SUPPLEMENT (TONS)				
COMPLETE FEED (TONS)				
HAY (TONS)				
DRY SILAGE (TONS)				
GREENFEED(TONS)				
STRAW - FEED (TONS)				
STRAW - BEDDING (TONS)				
SALT ,MIN., MOLASSES,ETC.		1538.43		15.74
NATIVE PASTURE		35.71		0.37
TAME PASTURE		2567.43		26.27
AFTERMATH PASTURE		128.71		1.32
RENTED PASTURE (TOTAL AUMS)	190.71			
TOTAL		4377.43		44.80